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TENTAMEN FLORÆ LUTCHUENSIS.

AUCTORIBUS

T. ITO ET J. MATSUMURA.

SECTIO I.

PLANTÆ DICOTYLEDONEÆ POLYPETALÆ.

Separatim impressæ ex Journal of the Science College,
Imperial University, Tōkyō, Japan.
Vol. XII.

TOKYO.
1899.

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Oct. 1918

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Tentamen Floræ Lutchuensis.

Sectio Prima.

PLANTÆ DICOTYLEDONEÆ POLYPETALÆ.

AUCTORIBUS

Tokutaro Ito,

Societatis Linnæanæ Londiniensis Socius,

et

Dr. J. Matsumura,

in Universitate imperiali Tokyoensi botanices Professor.

Introduction.

The rich vegetation of that beautiful archipelago, which lies scattered in the warm sea bathing the coasts of Eastern Asia, and which forms, as it were, stepping-stones between the south-eastern extremity of Japan and Formosa, is as yet imperfectly known. This archipelago, known as the Lûchû or Liukiu Islands, consists of several groups of islands of various sizes and configuration. The largest and by far the most important is Uchinâ or Okinawa, whose length is about seventy miles, and whose breadth varies from two to nineteen miles; whose northern part is rough and mountainous, rising to an elevation of some 1,500 feet; and whose inhabitants were so graphically described by Captain Basil Hall[1] more than three-quarters of

1) Captain Basil Hall's "Account of a Voyage of Discovery to the West of Corea and the Great Lochoo Island." London, 1818.

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a century ago, when he wrote that they "wear a loose dress, tied with a belt round their waist, their hair is brought tight up from all sides, and formed into a knot on the top of the head, with two metal pins stuck in it," and "this dress is naturally so graceful, that even the lowest boatmen have a picturesque appearance."

The investigation of the beautiful flora of such a fairy-land should, therefore, prove not only very interesting to the public, but also not without importance as a contribution to the present state of our scientific knowledge of Eastern Asia.

The present work is intended to be simply a preliminary contribution to the botany of these islands. The authors' labours will be amply repaid, if they serve to facilitate further researches in the same field.

The materials upon which the work is based are as follows:—

1. A small, but interesting, set of some 124 species, many of which, however, are in fragments, collected by Mr. YAMADA of the University of Tōkyō, during his short stay for the purpose of physical observations at Nâfa in the island of Uchinâ, and at Nazé in the island of Amami-Ōshima in August, 1882.

2. Mr. Y. TASHIRO's important collection made in 1887, and preserved in the Herbarium of the College of Science of the Imperial University of Tōkyō. This collection, hitherto but partially examined and determined, though more than a decade has elapsed since it was made, now at length finds full recognition in the present work. It covers the widest area in the Lûchû Islands, including Amami-Ōshima, Uchinâ, and the Myâku and Yêma (or Yayeyama) Archipelagoes, and consists of some 600 species of Phanerogams and Vascular Cryptogams.

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3. An excellent collection, by Mr. SETSUSABURŌ TANAKA, now Assistant Professor in the College of Agriculture of the Imperial University of Tōkyō, made in 1891 in the islands of Amami-Ōshima, Uchinâ, Myâku, Ishigachi, Irumuti, and Yunakuni, the last being a small island situated close to Formosa and then for the first time botanically explored; he also collected some plants in Tané-ga-shima, an island situated near Kyūshū in the southern part of Japan, and has generously placed at our disposal the whole collection numbering about 489, besides many duplicates.

4. A small set of plants collected by Mr. H. NAKAGAWA, formerly Professor in the High School at Kumamoto, during his biological mission to the islands of Amami-Ōshima and Uchinâ in 1892.

5. A rich collection made by one of the authors, T. ITŌ, who, while Professor at the Zōshikwan College at Kagoshima, in the province of Satsuma, visited in 1894, the islands of Amami-Ōshima, Uchinâ, Myâku, Irabu, Ishigachi, Irumuti, Takidun, Kubama, Aragushiku, Kuru-shima, Uchibanari and Sutubanari. His collection from these islands, comprising 929 numbers, besides several fine sets of duplicates, is the most comprehensive hitherto made, and forms the basis of the present work.

6. A small number of plants gathered at Binnu-taki in the island of Uchinâ and kindly sent to T. ITŌ by Mr. RINGEN TIRA, a Luchuan gentleman who accompanied the former in the mountainous districts of Kunjan in the same island during that author's botanical tour in the year 1894.

7. A set of some 42 species collected in Myâku-jima in 1895 by Mr. SHUMPŌ TATITU, a native gentleman of the same

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island who is a young and zealous student of science, and twice accompanied Itō during the latter's botanical journeys in that district.

8. A small, but exceptionally interesting, set of plants collected in the mountainous regions of the island of Ishigachi in 1895 by Mr. YASUICHI ARAGACHI, a highly cultivated Luchuan gentleman, who accompanied and zealously assisted Itō during his botanical tour through the islands of the Yêma Archipelago, and afterwards came to Kagoshima during the author's residence in that romantic city, for the purpose of studying English, being admitted into Itō's family for more than a year.

9. A small set of plants gathered in the island of Uchinâ in 1894 by Mr. KINNOSUKÉ HIRASAWA, who accompanied Itō to the same island. These plants are now preserved in the Normal School at Kagoshima, whence they have been kindly forwarded for examination by Mr. SAKUTARŌ HIGASHI.

10. Lastly, an interesting collection made by Dr. J. MATSUMURA, during a botanical tour in the island of Uchinâ in 1897.

There yet remains the pleasant duty of expressing our indebtedness and gratitude to all those gentlemen who have assisted us in various ways. To Baron NARABARA, Governor of the Lûchû Islands, we are especially indebted for the warm reception accorded to us during our visits to the archipelago over which he rules, and whose kind influence and personal interest in scientific investigation afforded us special facilities; to Baron UZUHIKO SHIMAZU and to Professor UMEKICHI YATABÉ, by whose kind recommendation one of the authors, Itō, was

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enabled to proceed for the purpose of botanical investigation to the Luchuan Archipelago; to Professor SETSUSABURŌ TANAKA for his kind generosity in submitting the whole of his important collection for determination; and to Mr. SAKUTARŌ HIGASHI, of the Normal School at Kagoshima, for the loan of some interesting specimens of Luchuan plants belonging to the same school.

Our thanks are also due to Messrs. SHINTARŌ OGAWA and HISASHI KUROIWA, the latter of whom accompanied Dr. MATSUMURA as far as Kunjan in the island of Uchinâ. Nor must we omit the name of Mr. ISABURŌ ITŌ, who accompanied T. ITŌ to the Lûchû Islands and assisted him in every possible way. The most grateful thanks of one of the authors are due likewise to the three young and highly cultivated Luchuan gentlemen, Messrs. TÎRA, TATITU, and ARAGACHI, all of whom accompanied ITŌ in his botanical tours through the island of Uchinâ, the Myâku Group, and the Yêma Archipelago, respectively.

To these and to all other friends by whose kind assistance we have been so fortunate as to profit, we tender our heartiest thanks.

Tōkyō,
23rd March, 1899.

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RANUNCULACEÆ.

Clematis, L.

C. Pierotti, Miq. Prol. Fl. Jap. p. 189; Franch. et Sav. Enum. Pl. Jap. I, p. 2; Maxim. in Mél. Biol. IX (1877) p. 585.

C. parviloba var. Pierotii, O. Kuntze, Monogr. Clematis, in Verhandl. Bot. Ver. Brandenb. XXVI (1885) p. 148.

Insula Amami-Ōshima (*Tashiro*! Sept. 1887, flor. et fructif.).

Insula Utchinâ: in tractu Kundjan (*Tashiro*! Aug. 1887, flor.).

Archipelago Yêma (*Tashiro*! Aug. et Sept. 1887, flor.).

Distrib. Japan.

Scandent, slightly pubescent. Leaves ternate or biternate, leaflets small, ovate or lanceolate, acute, 3-lobed, or sub-bilobed, or entire, sometimes with a few serratures; petiole slender, 2–5 cm. long. Peduncles very slender, 1-flowered, 1½–4 cm. long, axillary from the base of leaves, or 3–6 flowers clustered near the end of young branches, with 2 small opposite ovate obtuse bracts either near the middle or near the base. Flowers white. Sepals 4, spreading, ovate-lanceolate or linear-elliptical, about 15–20 mm. long, acute, with 3 reticulated veins; inside smooth, pubescent on the back. Stamens purple, smooth, shorter than the sepals, the filaments of the outer ones dilated, anthers small, linear, obtuse. Achenes numerous, furnished with long hairs.

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I observed this species in various localities on Amami-Ōshima in July 1894, but it was too early for flowers. Mr. Setsusaburō Tanaka collected some specimens at Tané-ga-shima, a small island lying between Amami-Ōshima and Kyūshū in southern Japan. [T. Itō].

C. apiifolia, DC. Syst. I, p. 149, et Prodr. I, p. 6; Hook. et Arn. Bot. Beech. Voy. p. 258; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1843) p. 176; Miq. Prol. Fl. Jap. p. 189; Benth. Fl. Hongk. p. 7, in adnot.; Franch. et Sav. Enum. Pl. Jap. I, p. 2; Maxim. in Mél. Biol. IX (1877) p. 593; Engler, in Bot. Jahrb. VI (1885) p. 58; Forbes et Hemsl. Ind. Fl. Sin. I, in Journ. Linn. Soc. XXIII (1886) p. 2; O. Kuntze, Monogr. Clematis, in Verhandl. Bot. Ver. Brandenb. XXVI (1885) p. 151; Henry, List Pl. Formos. in Trans. As. Soc. Jap. XXIV, Suppl. 1 (1898) p. 14.

C. virginiana, Lour. Fl. Cochinch. p. 345 (non L.).

Lûtchû (*Beechey*! in Herb. Kew., *H. Nakagawa*! n. 173, flor.).

Insula Amami-Ōshima (*Tashiro*! Sept. 1887, flor.).

Insula Utchinâ: ad oppidum Shui (*T. Itō*, nn. 778 et 779, 26 Julio et 7 Aug. 1894, flor.); circa Tumigushiku (*T. Itō*, n. 900, 28 Julio 1894, juvenil.); inter Tchatan et Unna (*T. Itō*, n. 976, 22 Aug. 1894, flor.).

Insula Myâku (*T. Itō*, n. 1150, 9 et 17 Aug. 1894, flor. et fructif.).

Archipelago Yêma: insula Ishigatchi ad pagos Shika-mura (*Kuroiwa* ex *Makino*), et Tunusuku-mura (*S. Tanaka*! n. 270, 8 Junio 1891, flor. et fructif.); insula Kuru-shima

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(*T. Itō*, n. 1366, 15 Aug. 1894, flor.); insula Takidun (*T. Itō*, n. 1365, 15 Aug. 1894, flor.).

DISTRIB. Japan, Formosa, the Corean Archipelago (*Oldham*!) and China.

C. paniculata, Thunb. in Trans. Linn. Soc. II (1794) p. 337; Willd. Sp. Pl. II, p. 1291; DC. Syst. I, p. 136, et Prodr. I, p. 3; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1843) p. 176; Miq. Prol. Fl. Jap. p. 189; Franch. et Sav. Enum. Pl. Jap. I, p. 1; Maxim. in Mél. Biol. IX (1877) p. 595; Franch. Pl. David. I, p. 12; Forbes et Hemsl. Ind. Fl. Sin. I, p. 6; Engler, in Bot. Jahrb. VI (1885) p. 58; Shitsumon Honzō, Gwaihen, III, t. 23.

C. crispa, Thunb. Fl. Jap. p. 239 (non L.).

C. recta var. paniculata, O. Kuntze, Monogr. Clematis, in Verhandl. Bot. Ver. Brandenb. XXVI (1885) p. 115.

C. virginica, Thunb. Fl. Jap. p. 240 (non L.).

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, flor. et fructif.).

DISTRIB. Japan, China and Corea.

C. Benthamiana, Hemsl. in Forbes et Hemsl. Ind. Fl. Sin. I, p. 2.

C. terniflora, Benth. Fl. Hongk. p. 7, in adnot. (sphalmate ternifolia); Forbes, in Journ. Bot. 1884, p. 265; Maxim. in Mél. Biol. IX (1877) p. 596, pro parte, et XII (1886) p. 416 (non DC.).

LÛTCHÛ, *Tashiro* sec. *Maximowicz*.

INSULA MYÂKU (*Tashiro*! Julio 1887, flor., *T. Itō*, n. 1149, 9 Julio 1894, flor.): circa Gushiku (*Tatitu*! n. 1228,

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25 Majo 1895, flor.); insula Irabu (*T. Itō*, n. 1207, 17 Aug. 1894, flor.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*).

DISTRIB. China.

The leaves become dark brown after desiccation.

C. Tashiroi, Maxim. in Mél. Biol. XII (1888) p. 713.

ARCHIPELAGO YÊMA (*Tashiro*! Aug. [Julio] 1887, flor. et fructif).

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, flor.).

DISTRIB. An endemic species.

Stem scandent, smooth, striate. Leaves pinnate, segments 3 (?) or 5,5-10 cm. long, 3-6 cm. wide, smooth, 5-7-nerved, ovate, subcordate, acute or obtuse, sometimes emarginate; petiole twining, slender, 8-11 cm. long. Flowers axillary, single; peduncle slender, nearly glabrous, about 7-9 cm. long, with a pair of small spathulate bracts at about ¼ from the base. Sepals spreading, ovate, tomentose. Stamens numerous, about half the length of the sepals, filaments glabrous, anthers linear. Carpels numerous. Achenes terminating in long feathery awns.

C. Meyeniana, Walp. in "Nov. Act. Nat. Cur. XIX, Suppl. 1 (1843) p. 297," et Repert. V, p. 3; Benth. Fl Hongk. p. 6; Maxim. in Mél. Biol. IX (1887) p. 597; Forbes et Hemsl. Ind. Fl. Sin. I, p. 5; Henry, List Pl. Formos. p. 14.

C. oreophila, Hance, in Walp. Ann. II, p. 3.

LŪTCHŪ (*Wright* ex *Forbes* et *Hemsley*, *H. Nakagawa*! flor., *Matsumura*, 1897, flor.).

INSULA AMAMI-ŌSHIMA: inter Nazé et Yamatohama

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(*T. Itō*, n. 585, 16 Julio 1894, fructif. immat.); inter Yamatohama et Taken (*T. Itō*, n. 599, 17 Julio 1894, flor.); inter Nishinakama et Nazé (*T. Itō*, n. 714, 20 Julio 1894, fructif.).

Insula Utchinâ: in tractu Kundjan ad Kushi-madjiri (*Tashiro*! Majo [April.?] 1887, flor. et fructif.).

Archipelago Yêma: insula Irumuti ad pagum Sunaimura (*S. Tanaka*! n. 325, 15 et 16 Junio 1891, fructif.).

Distrib. Formosa, Hongkong, and China.

Leaves ternate; segments ovate, or lanceolate, cordate, entire, stalked. Anthers longer than the filaments. Achenes many, terminating in tawny feathery awns.

* **C. florida,** Thunb. Fl. Jap. p. 240; Lam. Encycl. II, p. 45; Willd. Sp. Pl. II, p. 1287; Bot. Mag. t. 834; DC. Syst. I, p. 160, et Prodr. I, p. 8; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1843) p. 176; A. Gray, Bot. in Perry Exped. p. 305; Miq. Prol. Fl. Jap. 190; Franch. et Sav. Enum. Pl. Jap. I, p. 2; Maxim in Mél. Biol. IX (1877) p. 599; O. Kuntze, Monogr. Clematis in Verhandl. Bot. Ver. Brandenb. XXXVI (1885) p. 148; Shitsumon Honzō, Gwaihen, III, t. 23.

C. Sieboldi, Don.

Atragene florida, Pers.

Viticella florida, Spach.

Lûtchû, sec. *Siebold.* Culta.

Distrib. Cultivated in Japan.

C. sp.

Insula Utchinâ: in tractu Kundjan inter Tchatan et Unna (*T. Itō*, n. 997, 22 Aug. 1894, steril.).

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Leaves pinnate, glabrous; leaflets 3 or 5, ovate or oblong-ovate, often ovate-lanceolate, acute or acuminate, rounded or retuse at the base, entire, thin, green after desiccation.

This is an interesting species, but unfortunately the specimens are sterile and too imperfect for further determination.

There is also a juvenile specimen, of a species of *Clematis*, collected by Tashiro in July 1887 in Kushi-majiri in Kunjan in the island of Uchinâ, at present indeterminable, but the leaves are somewhat allied to the above species, from which nevertheless it differs by the leaflets having turned dark-brown in drying. The leaves in this specimen are 5-foliolate, with the leaflets lanceolate, acuminate, entire, and smooth.

Thalictrum, [Tourn.] L.

T. minus, L. Sp. Pl. ed. 1, p. 546; Lam. Encycl. t. 497, f. 3; Willd. Sp. Pl. II, p. 1297; Eng. Bot. tt. 11 et 611; " Fl. Dan. t. 732 "; DC. Syst. I, p. 178, et Prodr. I, p. 13; " Reichb. Ic. Fl. Germ. III, t. 27 "; Ledeb. Fl. Ross. I, p. 8; Hook. f. et. Thoms. Fl. Ind. I, p. 16, pro parte; Miq. Prol. Fl. Jap. p. 191 (var. *hypoleucum*); Franch, et Sav. Enum. Pl. Jap. I, p. 4; " Regel, Uebers. Thalict. p. 31, pro parte "; Boiss. Fl. Orient. I, p. 8; Hook. f. et Thoms. in Hook. f. Fl. Brit. Ind. I, p. 14; Kanitz, Anthophyta Jap. in Természetrajzi Füzetek, 1878, [p. 26]; Nyman, Conspect. Fl. Europ. p. 7; Lecoyer, Monogr. Thalict. in Bull. Soc. Bot. Belg. XXIV (1885) p. 124; Forbes et Hemsl. Ind. Fl. Sin. I, p. 8; Maxim. Fl. Tangut. I, p. 5, Enum. Pl. Mong. I, p. 7, et Pl. Chin. Potanin.

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in Act. Hort. Petrop. XI (1889) p. 19; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 9.

T. hypoleuca, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1843) p. 178.

INSULA AMAMI-ŌSHIMA, *Weiss* ex *Kanitz*.

DISTRIB. Europe, Siberia, Japan, China, Corea, Tibet, India, North and South Africa.

Ranunculus, L.

R. acris, L. Sp. Pl. ed. 1, p. 1554; Willd. Sp. Pl. II, p. 1326; Eng. Bot. t. 652; DC. Syst. I, p. 277, et Prodr. I, p. 36; "Reichb. Ic. Fl. Germ. III, t. 16 bis"; "Hook. Fl. Bor. Am. I, p. 18"; "Torr. et Gray, Fl. N. Am. I, p. 21, excl. var."; Ledeb. Fl. Alt. II, p. 331, et Fl. Ross. I, p. 40; A. Gray, Man. Bot. N. Un. St. p. 43; Regel, Tent. Fl. Ussur. p. 7, in nota; Fr. Schmidt, Reis. im Amurl. p. 105; Miq. Prol. Fl. Jap. p. 193; Franch. et Sav. Enum. Pl. Jap. I, p. 8; Nyman, Conspect. Fl. Europ. p. 12; Franch. Pl. David. I, p. 19; Forbes et Hemsl. Ind. Fl. Sin. I, p. 13; Miyabe, Fl. Kuril. in Mem. Bost. Soc. Nat. Hist. IV (1890) p. 215; Dur. et Schinz, Consp. Fl. Afr. I, p. 2, p. 14.

R. japonicus, Thunb. in Trans. Linn. Soc. II (1794) p. 337.

R. propinquus, C. A. Mey. in Ledeb. Fl. Alt. II, p. 332, et Fl. Ross. I, p. 40; Maxim Primit. Fl. Amur. p. 20; Regel et Til. Fl. Ajan. p. 32.

R. propinquus var. hirsutus, A. Gray, Bot. Jap. in Mem. Am. Acad. n. s. VI (1859) p. 378.

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INSULA UTCHINÂ : in tractu Kundjan ad Mutubu-madjiri (*Tashiro*! Martio [April.] 1887, flor.).

DISTRIB. Europe, Siberia, China, Japan and North Africa.

R. ternatus, Thunb. Fl. Jap. p. 241 ; "Wallstroem, Pl. Jap. in Thunb. Diss. p. 8, cum tab."; Maxim. Fl. As. Or. Fragm. in Bull. Soc. Nat. Mosc. 1879, p. 3 ; Forbes et Hemsl. Ind. Fl. Sin. I, p. 16 ; Henry, List Pl. Formos. p. 14.

R. extortus, Hance! in Ann. Sc. Nat. ser. 5, V (1866) p. 204.

R. Zuccarini, Miq. Prol. Fl. Jap. p. 241 ; Franch. et Sav. Enum. Pl. Jap. I, p. 8, II, p. 267 ; S. Moore, in Journ. Bot. 1878, p. 129.

INSULA II-JIMA adjectis insulis Utchinâ (*Tashiro*! April. 1887, flor.).

DISTRIB. Japan, Formosa and China.

The type specimen of *R. extortus,* Hance, preserved in the Kew Herbarium, England, has been examined by one of us, and found to be identical with the Japanese *R. ternatus,* Thumb. (syn. R. Zuccarini, Miq.).

R. pennsylvanicus, L. "Suppl. Pl. p. 272 ;" Willd. Sp. Pl. II, p. 1323 ; DC. Syst. I, p. 290, et Prodr. I, p. 40 ; "Hook. Fl. Bor. Am. I, p. 19"; Torr. et Gray, Fl. N. Am. I, p. 22 ; A. Gray, Man. Bot. N. Un. St. p. 41 ; Chapman, Fl. S. Un. St. p. 8 ; Hook. f. et Thoms. in Hook. f. Fl. Brit. Ind. I, p. 19 ; Forbes et Hemsl. Ind. Fl. Sin. I, p. 14.

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Var. fibrosus, T. Itō.

R. fibrosus, Wall. "Cat. n. 4706"; Hook. f. et Thoms. Fl. Ind. I, p. 37.

INSULA MYÂKU (*Tashiro*! Julio 1887, flor. et fructif. planta major.).

ARCHIPELAGO YÊMA (*Tashiro*! Aug. 1887, flor. et fructif. planta major.) : insula Kuru-shima (fide *Tashiro*).

DISTRIB. China and India.

Var. Sieboldi, T. Itō.

R. Sieboldi, Miq. Prol. Fl. Jap. p. 193 ; Franch. et Sav. Enum. Pl. Jap. I, p. 8 ; Forbes et Hemsl. Ind. Sin. I, p. 16.

LÛTCHÛ (*Wright*! in Herb. Kew.).

INSULA UTCHINÂ : ad Nâfa (*T. Itō*, n. 842, 4 Aug. 1894, flor.) ; ad oppidum Shui (*T. Itō*, n. 780, 26 Julio 1894, flor. et fructif.) ; in tractu Kundjan (*Tashiro*! April. 1887, flor. et fructif.).

DISTRIB. Japan and China.

Var. japonicus, Maxim. Pl. Chin. Potanin. in Act. Hort. Petrop. XI (1889) p. 24.

R. Japonicus, Langsd. ex Fisch. in DC. Prodr. I. p. 38 ; Maxim. Fl. As. Or. Fragm. in Bull. Soc. Nat. Mosc. 1879, p. 3 ; Forbes et Hemsl. Ind. Fl. Jap. I, p. 14 ; Miyabe, Fl. Kuril. in Mem. Bost Soc. Nat. Hist. IV (1890) p. 215 (non Thunb).

R. Ternatus, DC. Syst. I, p. 242, et Prodr. I, p. 31 ; Miq. Prol. Fl. Jap. p. 192 ; Franch. et Sav. Enum. Pl. Jap. I, p. 7 ; Franch. Pl. David. I, p. 19 (non Thunb.)

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R. Vernyi, Franch. et Sav. Enum. Pl. Jap. I, p. 8, II, p. 266.

LÛTCHÛ (*Wright*! in Herb. Kew., *H. Nakagawa*! flor. cum fructif.).

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, frf.): ad Nazé (*T. Itō*, n. 490, 15 Julio 1894, flor. cum fructif. immat.); inter Nazé et Yamatohama (*T. Itō*, n. 546, 16 Julio 1894, flor.).

ARCHIPELAGO YÊMA: in insula Ishigatchi prope pagum Nagura-mura (*T. Itō*, n. 1270, 11 Aug. 1894, flor. et fructif.).

DISTRIB. Japan and China.

This variety may at once be distinguished from *var. typicus* by its naked or slightly pubescent stem and leaves, but is never so hirsute, especially on the stem, petioles, and peduncles, as we observe in *var. typicus*.

R. sceleratus, L. Sp. Pl. ed. 1, p. 551; Willd. Sp. II, p. 1315; "Fl. Dan. t. 371"; Eng. Bot. t. 681; DC. Syst. I, p. 268, et Prodr. I, p. 34; D. Don, Prodr. Fl. Nep. p. 195; "Reichb. Ic. Fl. Germ. III, t. 11"; "Royle, Illustr. t. 53"; Torr. et Gray, Fl. N. Am. I, p. 19; A. Gray, Man. Bot. N. Un. St. p. 142; Chapman, Fl. S. Un. St. p. 8; Ledeb. Fl. Alt. II, p. 327, et Fl. Ross. I, pp. 45 et 733; Regel, Pl. Radd. I, p. 50; Turcz. Fl. Baical. Dahur. I, p. 56; Harv. in Harv. et Sond. Fl. Cap. I, p. 7; Maxim. Primit. Fl. Amur. p. 468; Miq. Prol. Fl. Jap. p. 192; Franch. et Sav. Enum. Pl. Jap. I, p. 9; Franch. Pl. David. I, p. 16, et "Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 197"; Hook. f. et Thoms. Fl. Ind. I, p. 35; Hook. f. et Thoms. in Hook. f. Fl. Brit. Ind. I, p. 19; Hance, in Journ. Linn. Soc. XIII (1872) p. 376;

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Nyman, Conspect. Fl. Europ. p. 12; Forbes et Hemsl. Ind. Fl. Sin. I, p. 16; Maxim. Enum. Pl. Mong. I, p. 23; Henry, List Pl. Formos. p. 14; Dur. et Schinz, Consp. Fl. Afr. I, p. 23.

R. holophyllus, Hance, in "Ann. Sc. Nat. ser. 4, XV (1866) p. 220," et in Journ. Linn. Soc. XIII (1872) p. 98.

R. oryzetorum, Bunge, Enum. Pl. Chin. Bor. p. 2?

INSULA UTCHINÂ: ad oppidum Shui (*Tashiro*! Junio 1887, flor.).

ARCHIPELAGO YÊMA (*Tashiro*! Julio 1887, flor.): insula Kuru-shima (ex *Tashiro*).

DISTRIB. Europe, Siberia, Japan, Formosa, China, India, and North Africa; introduced in America.

Aconitum, [Tourn.] L.

A. Fischeri, Reichb. "Illustr. Acon. t. 22"; "Regel, Conspect. Acon. in Ind. Sem. Petrop. 1861, p. 44", et Pl. Radd. I, p. 98, t. 3; Fr. Schmidt, Reis. im Amurl. p. 107; Miq. Prol. Fl. Jap. p. 196; Franch. et Sav. Enum. Pl. Jap. I, p. 12; "Franch. in Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 198" (excl. synon. Decne.); Kanitz, Anthophyta Jap. in Természetrajzi Füzetek, 1878, [p. 26]; Miyabé, in Mem. Bost. Soc. Nat. Hist. IV (1890) p. 216; Bot. Mag. t. 7130; Shitsumon Honzō, Naihen, IV, tt. 1 et 2.

A. arcuatum, Maxim. Primit. Fl. Amur. p. 27.

A. autumnale, Lindl. in "Journ. Hort. Soc. Lond. II, p. 77," et "Paxton, Fl. Gard. I, p. 187", cum figura.

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A. chinense, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 183; "Benth. in Hook. Lond. Journ. Bot. 1847, p. 46"; S. Moore, in Journ. Bot. 1878, p. 137 (non *A. chinense*, Bot. Mag. t. 3852).

A. japonicum, Hortul. ex Sieb. et Zucc. Fl. Jap. Fam. Nat. loc. cit.

A. Lubarskyi, Reichb. "Illustr. Acon. t. 20."

A. maximum, DC. Syst. I, p. 380, et Prodr. I, p. 61 (non Pall. Herb., nec Reichb.).

A. Napellus, Thunb. Fl. Jap. p. 231 (non L.).

A. sp., Hemsl. in Journ. Bot. 1876, p. 206.

Insula Amami-Ōshima, cult. (*Weiss* sec. *Kanitz*).

Distrib. Siberia, Japan, Corea, China and North America.

In the Shitsumon Honzō, Naihen, II, t. 10, there is an illustration of *Cimicifuga*.

Pæonia, L.

***P. Moutan**, Sims, Bot. Mag. t. 1154; DC. Syst. I, p. 387, et Prodr. I, p. 65; Anderson, in Trans. Linn. Soc. XII (1818) p. 252; "Bot. Regist. t. 379"; Miq. Prol. Fl. Jap. p. 197; Franch. et Sav. Enum. Pl. Jap. I, p. 14; Baker, in Gard. Chron. n. s. XXI (1884) p. 799; Forbes et Hemsl. Ind. Fl. Sin. I, p. 22; Keisuke Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, t. 1.

Lûtchû, sec. *Siebold*. Cult.

Distrib. Cultivated in China and Japan; probably wild in the former country.

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DILLENIACEÆ.

Actinidia, Lindl.

A. callosa, Lindl. "Introd. Nat. Syst. ed. 2. p. 439 (1836)"; Dyer in Hook. f. Fl. Brit. Ind. I, p. 286, excl. syn.; Forbes et Hemsl. Ind. Fl. Sin. I, p. 78; Maxim. in Mél. Biol. XII (1886) p. 423, et in Act. Hort. Petrop. XI, p. 35; Henry, List Pl. Formos. p. 20.

A. arguta, Planch in "Hook. Lond. Journ. Bot. VI, p. 203 in adnot"; Miq. Prol. Fl. Jap. p. 203; Franch. et Sav. Enum. Pl. Jap. I, p. 58; Forbes et Hemsl. Ind. Fl. Sin. I, p. 78; Fr. Schmidt, Reis. in Amurl. p. 118; Maxim. in Mél. Biol. XII (1886) p. 423.

A. rufa, Planch. in "Hook. Lond. Journ. Bot. VI, p. 303 in adnot."; Miq. Prol. Fl. Jap. p. 203; Franch et Sav. Enum. Pl. Jap. I, p. 58.

A. arguta var. rufa, Maxim. in Mél. Biol. XII (1886) p. 424.

A. cordifolia, Miq. Prol. Fl. Jap. p. 203; Franch. et Sav. Enum. Pl. Jap. I, p. 58.

A. Kolomikta, Maxim. Primit. Fl. Amur. p. 63, et in Mél. Biol. XII (1886) p. 425; Fr. Schmidt Reis. in Amurl. p. 118.

A. platyphylla, A Gray! in Miq. Prol. Fl. Jap. p. 203; Franch. et Sav. Enum. Pl. Jap. I, p. 58.

Trochostigma arguta, Sieb. et Zucc. in Abhandl. Muench. Acad. III, pt. 3 (1843) p. 727.

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T. Kolomikta, Rupr. in "Bull. Phys. Math. Acad. Pétersb. XV (1857) p. 261."

T. rufa, Sieb. et Zucc. in Abhandl. Muench. Acad. III, pt. 2 (1843) p. 727.

LÛTCHÛ (*Wilford* fide *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA (*Wright* fide *Forbes* et *Hemsl.*) inter pagos Nishinakama et Nazé (*T. Itō.* n. 715, 20 Julio 1887, fructif.).

INSULA UTCHINÂ: tractu Kundjan (*Matsumura* 1897); Unna-madjiri monte Unna-daki (*Tashiro*! Majo 1887, steril.).

ARCHIPELAGO YÊMA: insula Ishigatchi ad pagum Kabira (*S. Tanaka*! n. 272, 26 Julio 1891, steril.).

DISTRIB. Japan, Formosa, China, Mandshuria, and Himalaya.

NOM. LUTCH.: Kûgâ (Y*) ex *T. Itō.*

The fruits of this species are gathered and eaten by the natives of Ishigachi; while in the island of Takidun, they are offered to the deity at the Sōrō-unké festival.

As to the limitation of this species, we follow Bentham (in Journ. Linn. Soc. V. p. 55). The specimens collected in Amami-Ōshima are glabrous, and the branches are furnished with rufous lenticels. Leaves glabrous chartaceous, shining above, glabrous below, ovate or elliptical-lanceolate, acuminate, base acute or subcordate, setose-serrulate, 8-12 cm. long, 6-7½ cm. broad; petiole 4-5½ cm. long. Fruits edible, 1½ cm. long, oblong-globose, verrucose, stigma not persistent, calyx small, reflexed; peduncles axillary, simple or branched, 1½-3 cm. long, rather hard, with linear bracts.

* Y.-Yêma; M.=Myâku; O.=Amami-Ōshima; U.=Utchinâ.

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CALYCANTHACEÆ.

Chimonanthus, Lindl.

* **C fragrans,** Lindl. "Bot. Regist. t. 451 (1820)"; DC. Prodr. III, p. 2; Miq. Prol. Fl. Jap. p. 91; Franch. et Sav. Enum. Pl. Jap. I, p. 15; Forbes et Hemsl. Ind. Fl. Sin. I, p. 22; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, I, t. 3; Maxim. Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 39.

C. grandiflorus, Steud. Nom. ed. 2, I, p. 350.

C. luteus, Hort. ex "Bielowski, in Ann. Soc. Linn. Maine-et-Loire, IX (1867) p. 96."

C. præcox, Lindl. "Bot. Regist. sub. t. 404."

C. verus, Hort. ex "Bielowski, in Ann. Soc. Linn. Maine-et-Loire, IX (1867) p. 96."

Calycanthus præcox, L. "Sp. Pl. ed. 2, p. 718"; Bot. Mag. t. 466.

INSULA UTCHINÂ : ad Nâfa in hort. cult. sec. *Tashiro* in litt.

ARCHIPELAGO YÊMA, cult. sec. *Tashiro* in litt.

DISTRIB. Native of China; introduced into Japan.

MAGNOLIACEÆ.

Illicium, L.

I. Tashiroi, Maxim. in Mél. Biol. XII (1888) p. 716.

ARCHIPELAGO YÊMA : insula Irumuti in montanis (*Tashiro* ! April. 1887, flor.).

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DISTRIB. Endemic.

A glabrous tree. Branches slender, cylindrical. Leaves alternate, coriaceous, oblong-elliptical, 9½-13½ cm. long, 2½-3⅜ cm. wide, shining above, margin entire, attenuate at the both ends; petiole 1-1½ cm. long. Flowers terminal, about 1 cm. diam. Peduncle 1-flowered, cylindrical, slender, fleshy, 1½-2 cm. long. Petals rotundate-ovate or ovate-oblong, obtuse, ciliate.

In the Shitsumon Honzō, Gwaihen, IV, t. 24, there is an illustration of a species of *Illicium*.

Michelia, L.

M. compressa, Maxim. in Mél. Biol. VIII (1872) p. 506 (sub *Magnolia*); Franch. et Sav. Enum. Pl. Jap. I, p. 15; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, I, t. 18; Henry, List Pl. Formos. p. 16.

INSULA UTCHINÂ (*Matsumura*, 1897, steril.) tractu Kundjan in montosis (*Tashiro*! April. 1887, flor).

DISTRIB. Japan and Formosa.

The leaves of a sterile branch collected by Matsumura are uncommonly large, obovate-oblong, 14½ cm. long, 6 cm. wide, obtuse-mucronate or obtuse, rusty-tomentose below when young, but soon become glabrous. At first it seemed a distinct species, but after consideration we concluded it to be simply an abnormal form of *M. compressa*, (Maxim.).

Magnolia, L.

* **M. pumila,** Andr. "Bot. Repos. t. 226"; Bot. Mag. t. 977; DC. Syst. I, p. 458, et Prodr. I, p. 81; "Hance, Advers.

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p. 6"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 24; Henry, List Pl. Formos. p. 16 (non Spreng.).

Magnolia Championi, Benth. Fl. Hongk. p. 8.

M. Coco, DC. Syst. I, p. 459, et Prodr. I, p. 81.

Liriodendron Coco, Lour. Fl. Cochinch. p. 347.

L. liliifera, L. "Sp. Pl. ed. 2, p. 755"; Willd. Sp. Pl. II, p. 1257.

Talauma pumila, Blume, Fl. Jav. Magnol. p. 38, t. 12 C.

INSULA UTCHINÂ in hort. cult. ex *Tashiro* in litt.

DISTRIB. Formosa, Hongkong and China.

M. Kobus, DC. Syst. I, p. 456, et Prodr. I, p. 81; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 187; Miq. Prol. Fl. Jap. p. 146; Maxim. in Mél. Biol. VIII (1872) p. 507; Franch. et Sav. Enum. Pl. Jap. I, p. 16; Shitsumon Hōnzō, Naihen, IV, t. 11; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, I, t. 10.

M. glauca var. α, Thunb. Fl. Jap. p. 236.

M. tomentosa, Thunb. in Trans. Linn. Soc. II (1793) p. 336 pro parte; Willd. Sp. Pl. II, p. 1257.

LÛTCHÛ, ex Shitsumon Honzō, l.c. An spontanea?

DISTRIB. Japan.

M. hypoleuca, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 187; Miq. Prol. Fl. Jap. p. 146; Maxim. in Mél. Biol. VIII (1872) p. 509; Franch. et Sav. Enum. Pl. Jap. I, p. 17; Shitsumon Honzō, Naihen, IV, t. 12; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, I, t. 14.

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LÛTCHÛ, ex Shitsumon Honzō, l.c. An spontanea?
DISTRIB. Japan.

Kadsura, Kæmpf.

K. japonica, L. Sp. Pl. p. 576; Miq. Prol. Fl. Jap. p. 255; Franch. et Sav. Enum. Pl. Jap. I. p. 18; Henry, List Pl. Formos. p. 16; Shitsumon Honzō, Naihen, IV, t. 4.

Uvaria japonica, Thunb. Fl. Jap. p. 237.

INSULA UTCHINÂ (*Matsumura,* 1897, steril.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*); insula Irumuti ad pagum Fushitati-mura (*T. Itō,* n. 1413, 13 Aug. 1894, steril.).

NOM. LUTCH.: Andakajâ (Y.) ex *T. Itō.*

DISTRIB. Japan and Formosa.

Trochodendron, Sieb. et Zucc.

T. aralioides, Sieb. et Zucc.! Fl. Jap. I, p. 83, tt. 39 et 40; Miq. Prol. Fl. Jap. p. 146; Franch. et Sav. Enum Pl. Jap. I, p. 19; Henry. List Pl. Formos. p. 16.

ARCHIPELAGO YÊMA: insula Irumuti in montanis (*Tashiro*! Julio [Oct.] 1887, steril.).

DISTRIB. Japan and Formosa.

MENISPERMACEÆ.

Cocculus, DC.

C. laurifolius, DC. Syst. I, p. 530, et Prodr. I, p. 100;

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"Delessert, Ic. Sel. I, t. 97"; Colebrooke, in Trans. Linn Soc. XIII (1822) p. 65; Hook. f. et Thoms. Fl. Ind. I, p. 191, et in Hook. f. Fl. Brit. Ind. I, p. 101; Miq. Fl. Ind. Bat. I, pt. 1, p. 81, et Prol. Fl. Jap. p. 198; Franch. et Sav. Enum. Pl. Jap. I, p. 19; Maxim. in Mél. Biol. XI (1883) p. 650; Henry, List Pl. Formos. p. 16.

C. angustifolius, Hassk. Hort. Bong. p. 172, et "Pl. Jav. Rar. p. 167."

Cebatha laurifolia, O. Kuntze, Revis. Gen. Pl. I, p. 9 (1891).

Holopeira australis, Miers, "Bot. Contrib. III, p. 277."

H. fusiformis, Miers, "Bot. Contrib. III, p. 276."

H. laurifolia, Miers, "Bot. Contrib. III, p. 276."

Menispermum laurifolium, Roxb. Fl. Ind. III, p. 815.

LÛTCHÛ (*K. Hirasawa*! 1894, steril., in Herb. Normal School, Kagoshima).

INSULA UTCHINÂ: in tractu Kundjan (*Tashiro*! April. et Majo 1887, flor.).

ARCHIPELAGO YÊMA (*Tashiro*! Julio 1887, flor.): insula Kuru-shima (ex *Tashiro*).

DISTRIB. Japan, Formosa, Java, Himalaya and India.

Pericampylus, Miers.

? P. incanus, Miers, in "Ann. Nat. Hist. ser. 2, VII (1851) p. 40", et "Bot. Contrib. III, p. 118, t. 111"; Benth. Fl. Hongk. p. 13; Hance, in Journ. Linn. Soc. XIII (1872) p. 99; Hook. f. et Thoms. Fl. Ind. I, p. 194, et in Hook. f. Fl. Brit. Ind. I, p. 102; Forbes et Hemsl. Ind. Fl. Sin. I, p. 29; Henry, List Pl. Formos. p. 16.

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P. aduncus, Miers, in "Ann. Mag. Nat. Hist. ser. 3, XIV (1864) p. 371," et "Bot. Contrib. III, p. 119."

P. membranaceus, Miers, in "Ann. Mag. Nat. Hist. ser. 3, XIV (1864) p. 371, et Bot. Contrib. III, p. 122."

Cissampelos Mauritiana, Wall. "Cat. n. 4980 (non DC.)."

Cocculus incanus, Colebrooke, in Trans. Linn. Soc. XIII (1822) p. 57, t. 6, f. 1; Maxim. in Mél. Biol. XI (1883) p. 650.

Menispermum villosum, Roxb. Fl. Ind. III, p. 812 (non Lam.).

Clypea corymbosa, Blume, Bijdr. p. 24.

INSULA MYÂKU (*Tashiro*! Julio 1887, steril.).

DISTRIB. Formosa, Hongkong, South China, Malaya, Himalaya and India.

Tashiro's specimen, considered by him a species of *Cocculus*, is sterile and too imperfect for determination. We, however, suggest that it may be *Pericampylus incanus*, Miq. It is a pubescent climber, with cordate, or subpeltate-cordate, leaves, which are velvety and villous on the veins below; veins are palmate, 7 or 9; petiole villous, as long as the lamina.

The figure represented in the Shitsumon Honzō, Naihen, II, t. 8, seems to be *Cocculus diversifolius*, Miq. (=*Menispermum diversifolius*, Prantl).

Stephania, Lour.

S. discolor, Spreng. Syst. IV, Cur. Post. p. 316; "Hassk. Pl. Jav. Rar. p. 168"; Hemsl. in Annals of Bot. X, (1896) p. 231.

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S. hernandifolia, Walp. Repert. I, p. 96; Hook. et Thoms. Fl. Ind. I, p. 196; "Miers, Bot. Contrib. III, p. 222"; A. Gray, Bot. Jap. in Mem. Am. Acad. n. s. VI (1859) p. 380; Benth. Fl. Hongk. p. 13, et Fl. Austral. I, p. 57; Miq. Prol. Fl. Jap. p. 108; Franch. et Sav. Enum. Pl. Jap. I, p. 20; Hook. f. et Thoms. in Hook. f. Fl. Brit. Ind. I, p. 103; F. Muell. Fragm. IX, p. 76; Maxim. in Mél. Biol. XI (1883) p. 643, t. 3, figg. 1-9; Forbes et Hemsl. Ind. Fl. Sin. I. p. 29; Henry, List Pl. Formos. p. 16.

S. hypoglauca, Miers, "Bot. Contrib. III, p. 227."

S. intertexa, Miers, "Bot. Contrib. III, p. 224."

S. japonica, Miers, "Bot. Contrib. III, p. 213"; Kanitz, Anthophyta Jap. in Természetrajzi Füzetek, 1878, [p. 26].

S. latifolia, Miers, "Bot. Contrib. III, p. 224."

S. longa, Lour. Fl. Cochinch. p. 609.

Cissampelos discolor, DC. Syst. I, p. 534, et Prodr. I, p. 101; Blume, Bijdr. p. 26.

C. hernandifolia, Willd. Sp. Pl. IV, p. 861; DC. Syst. I, p. 533, et Prodr. I, p. 100; Roxb. Fl. Ind. III, p. 842.

C. hexandra, Roxb. Fl. Ind. III, p. 842.

Clypea consummata, Miers, "Bot. Contrib. III, p. 209."

C. hernandifolia, Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 14; Wight, Ic. Pl. Ind. Or. t. 939.

Cocculus japonicus, DC. Syst. I, p. 516, et Prodr. I, p. 96; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 189.

C. subovata, Miers, "Bot. Contrib. III, p. 209."

Menispermum japonicum, Thunb. Fl. Jap. p. 193; Lam. Encycl. III, p. 96; Willd. Sp. Pl. IV, p. 827.

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INSULA AMAMI-ŌSHIMA: inter Nazé et Yamatohama (*T. Itō*, n. 547, 17 Julio 1894, flor.); inter Nishinakama et Nazé (*T. Itō*, n. 716, 20 Julio 1894, flor. et fructif.).

INSULA UTCHINÂ (*Tashiro*! Julio 1887, fructif.).

INSULA MYÂKU (*Tashiro*! Julio 1887, fructif.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*).

DISTRIB. Japan, Formosa (*Oldham*! *Makino*!), Hongkong, South China, the Philippines, Malaya, India, Ceylon, Africa, Australia and Polynesia.

BERBERIDEÆ.

Stauntonia, DC.

S. hexaphylla, Decne, in Ann. Sc. Nat. sér. 2, XII (1839), p. 105; Sieb. et Zucc. Fl. Jap. I, p. 148, t. 11; Miq. Prol. Fl. Jap. p. 197; Franch. et Sav. Enum. Pl. Jap. I, p. 21; Maxim. in Engler, Bot. Jahrb. VI (1885) p. 581; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, p. 3, t. 3; Forbes et Hemsl. Ind. Fl. Sin. I, p. 30; T. Itō, in Journ. Linn. Soc. XXII (1887) p. 423; Henry, List Pl. Formos. p. 16.

Rayana hexaphylla, Thunb. Fl. Jap. p. 149.

INSULA AMAMI-ŌSHIMA (*Doederlein* ex *Maximowicz*).

INSULA UTCHINÂ (*Tashiro*! Junio 1887, *Matsumura*, 1897, steril.).

DISTRIB. Japan, Formosa, Corea and Hongkong (*Ford*!).

I have gratefully, to acknowledge my indebtedness to Mr. Ford, the able superintendent of the Botanic Gardens, Hong-

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kong, who kindly gave me, when I visited the island in 1888, some fresh specimens of this species, discovered by him in the same island. [T. Itō].

Berberis, L.

B. Thunbergii, DC. Syst. II. p. 1, et Prodr. I, p. 106; Regel, Descr. Pl. Nov. Turkest. Fasc. I (1873) p. 21; T. Itō, in Journ. Linn. Soc. XXII (1887) p. 426; Shitsumon Honzō, Gwaihen, IV, t. 26; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, t. 4.

B. cretica, Thunb. Fl. Jap. p. 146.

B. sinensis, C. Koch, in Ann. Mus. Bot. Mus. Lugd.-Bat. I, p. 252; Miq. Prol. Fl. Jap. p. 1; Franch. et Sav. Enum. Pl. Jap. I, p. 22, et II, p. 272 (non Desf.).

LÛTCHÛ, sec. Shitsumon Honzō, l. c.

DISTRIB. Japan.

Nandina, Thunb.

N. domestica, Thunb. Nov. Gen. Pl. p. 14, et Fl. Jap. p. 147; Lam. Illustr. t. 261; Willd. Sp. Pl. II, p. 230; Banks, Ic. Kæmpf. tt. 13 et 14; DC. Syst. II, p. 22, et Prodr. I, p. 109; Bot. Mag. t. 1109; C. Koch, in Ann. Mus. Bot. Lugd.-Bat. I, p. 253; Miq. Prol. Fl. Jap. p. 2; Franch. et Sav. Enum. Pl. Jap. I, p. 23; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, p. 9, tt. 8 et 9; Forbes et Hemsl. Ind. Fl. Sin. I, p. 32; T. Itō, in Journ. Linn. Soc. XXII (1887) p. 429.

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INSULA AMAMI-ŌSHIMA (*Oldham*! n. 334, Oct. 1861, fructif. in Herb. Kew.).

NOM. LUTCH.: Nanten (O.) ex *Tashiro* in litt.

DISTRIB. Japan and China.

Tashiro (in litt.), however, mentions this as a cultivated plant in Amami-Ōshima.

Epimedium, L.

E. macranthum, Morr. et Decne, in Ann. Sc. Nat. sér. 2, II, p. 253, t. 13; Lindl. Bot. Reg. t. 1906; Paxton, Bot. Mag. V, p. 151, cum icon.; C. Koch, in Ann. Mus. Bot. Lugd.-Bat. I, p. 253; Miq. Prol. Fl. Jap. p. 2; Franch. et Sav. Enum. Pl. Jap. I, p. 23; Baker, in Gard. Chron. n. s. XIII (1880) p. 683; Baker et Moore, in Journ. Linn. Soc. XVII, p. 377; Forbes et Hemsl. Ind. Fl. Sin. I, p. 32; T. Itō, in Journ. Linn. Soc. XXII (1887) p. 403; Shitsumon Honzō, Naihen, II, t. 6, et Gwaihen, II, t. 21 (var).

LŪTCHŪ, sec. Shitsumon Honzō, l.c.

DISTRIB. Japan, Corea and China.

NYMPHÆACEÆ.

Nelumbo, Adans.

* **N. nucifera,** Gærtn. "Fruct. I, p. 73, t. 19, f. 2"; Franch. et Sav. Enum. Pl. Jap. I, p. 26.

N. indica, Poir. Encyl. IV, p. 453.

N. javanica, Poir. Encyl. IV, p. 453.

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Nelumbium asiaticum, Rich. in "Ann. Mus. XVII, p. 249, t. 9."

N. speciosum, Willd. Sp. Pl. II, p. 1258 ; Lam. Illustr. t. 453; DC. Syst. II, p. 44, et Prodr. I, p. 113; Bot. Mag. t. 903; Roxb. Fl. Ind. II, p. 647 ; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 16 ; Wight, Illustr. t. 9 ; Ledeb. Fl. Ross. I, p. 83 (*var. caspicum*) ; Hook. f. et Thoms. Fl. Ind. I, p. 248 ; Ait. Hort. Kew. ed. 2, III, p. 332 ; Hook. f. et Thoms. in Hook. f. Fl. Brit. Ind. I, p. 116 ; "Franch in Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 199"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 34 ; Henry, List Pl. Formos. p. 17.

Nymphæa Nelumbo var. α L. Sp. Pl. ed. 1, p. 730.

N. Nelumbo, Burm. "Fl. Ind. p. 119 (1768)"; Thunb. Fl. Jap. p. 223 (1784) ; Lour. Fl. Cochinch. p. 340 (1790).

Cyamus mysticus, Salisb. "Ann. Bot. II, p. 75."

C. Nelumbo, Smith, "Exot. Bot. I, p. 59, tt. 31 et 32."

INSULA UTCHINÂ : ad oppidum Shui in hort. cult. ex *Tashiro* in litt.

ARCHIPELAGO YÊMA, cult. ex *Tashiro* in litt.

NOM. LUTCH.: Hasu ex *Tashiro*.

DISTRIB. Persia, India, Ceylon, the Philippines, Malaya and tropical Australia ; commonly cultivated in Japan, Formosa and China.

Nuphar, J. E. Smith.

* **N. japonicum,** DC. Syst. II, p. 62, et Prodr. I, p. 116 ; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 170 ; Miq. Prol. Fl. Jap. p. 364 ; Franch. et Sav. Enum. Pl. Jap. I, p. 25.

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Nymphæa japonica, O. Kuntze, Revis. Gen. Pl. I, pt. 1, p. 12.

N. lutea, Thunb. Fl. Jap. p. 233 (non. L.).

INSULA AMAMI-ŌSHIMA, cult. ex *Tashiro* in litt.

NOM. LUTCH.: Kō-honé (O.) ex *Tashiro*.

DISTRIB. Japan.

PAPAVERACEÆ.

Macleya, R. Br.

M. cordata, R. Br. in "App. Deh. et Clapp. p. 218"; Franch. et Sav. Enum. Pl. Jap. I, p. 27; Shitsumon Honzō, Gwaihen, IV, t. 3.

Bocconia cordata, Willd. Sp. Pl. II, p. 841; Bot. Mag. t. 1905; Ait. Hort. Kew. ed. 2, III, p. 142; DC. Syst. II, p. 91, et Prodr. I, p. 121; Miq. Prol. Fl. Jap. p. 199; Hance, in Journ. Bot. (1870) p. 312, et (1874) p. 259; Franch. Pl. David. I, p. 27; Forbes et Hemsl. Ind. Fl. Sin. I, p. 35.

LŪTCHŪ, sec. Shitsumon Honzō, l. c.

DISTRIB. Japan and China.

Chelidonium, L.

C. majus, L. Sp. Pl. ed. 1, p. 505; "Fl. Dan. t. 543"; Eng. Bot. t. 1501; Huds. Fl. Angl. p. 228; Lam. Encycl. I, p. 713; Willd. Sp. Pl. II, p. 1141; DC. Syst. II, p. 99, et Prodr. I, p. 123; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 171; "Reichb. Ic. Fl. Germ. III,

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t. 10"; Torr. et Gray, Fl. N. Am. I, p. 62; A. Gray, Man. Bot. N. Un. St. p. 68; Ledeb. Fl. Alt. II, p. 271, et Fl. Ross. I, p. 91; Tranttv. et Mey. F. Ochot. p. 13; Bunge, Enum Pl. Chin. Bor. p. 78; Turzc. Fl. Baic. Dah. I, p. 99; Maxim. Primit. Fl. Amur. p. 35; Regel, Tent. Fl. Ussur. p. 19, et Pl. Radd. I, p. 133; Fr. Schmidt, Reis. in Amurl. pp. 33 et 110; Boiss. Fl. Orient. I, p. 124; Lowe, Man. Fl. Madeira, p. 13; Miq. Prol. Fl. Jap. p. 199; Franch. et Sav. Enum. Pl. Jap. I, p. 28; Franch. Pl. David. I, p. 27; Nyman, Consp. Fl. Europ. p. 25; Forbes et Hemsl. Ind. Fl. Sin. I, p. 35; Maxim. Enum. Pl. Mongol. I, p. 35, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 46; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 61; Shitsumon Honzō, Gwaihen, II, t. 10.

Lûtchû, ex Shitsumon Honzō, l. c.

Distrib. Europe, Persia, Siberia, Mongolia, China, Corea and Japan; introduced into North America.

FUMARIACEÆ.

Corydalis, DC.

C. pallida, Pers. Syn. Pl. II, p. 270; DC. Syst. II, p. 128, et Prodr. I, p. 129; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 174; Miq. Prol. Fl. Jap. p. 201; Maxim. in Mél. Biol. X (1877) p. 49, in adnot.; Franch. et Sav. Enum. Pl. Jap. I, p. 31, et II, p. 276; Bot. Mag. t. 6826; Forbes et Hemsl. Ind. Fl. Sin. I, p. 37; Maxim. in Bull. Soc. Nat. Mosc. (1879) p. 4; Henry, List Pl. Formos. p. 17.

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C. aurea, Willd. *var. γ pallida*, Regel, Pl. Radd. I, p. 146.

C. aurea, Willd. *var. speciosa*, Regel, Tent. Fl. Ussur. p. 19, et Pl. Radd. I, pp. 145 et 149; Gartenfl. (1861) p. 373, t. 343; Franch. et Sav. Enum. Pl. Jap. II, p. 275.

C. heterocarpa, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 173.

C. speciosa, Maxim. Primit. Fl. Amur. p. 39.

C. Wilfordi, Regel, Pl. Radd, I, p. 148; Miq. Prol. Fl. Jap. p. 201; Franch. et Sav. Enum. Pl. Jap. I, p. 30, et II, p. 275.

Fumaria lutea, Thunb. Fl. Jap. p. 277 (non L.).

F. pallida, Thunb. in "Nov. Act. Petrop. XII, p. 103, t. C"; Willd. Sp. Pl. III, p. 865.

Sophocarpnos pallida, Turcz in Bull. Soc. Nat. Mosc. (1841) I, p. 570, et in "Flora, XXXI (1848) p. 707."

Insula Amami-Ōshima: inter Nazé et Yamatohama (*T. Itō*, n. 548, 16 Julio 1894, flor. et fructif.).

Insula Myâku (*Tashiro*! Julio 1886, fructif.): prope Gushiku (*Tatitu*! n. 1229, 25 Majo 1895, deflor.).

Archipelago Yêma: insula Kuru-shima (ex *Tashiro*, *T. Itō*, n. 1368, 15 Aug. 1894, fruct. immat.); insula Taki-dun (*T. Itō*, n. 1367, 15 Aug. 1894, flor. et fruct. immat.).

Nom. Lutch.: Yamânu-mmaga-yusupasukusa (M.) ex *Tatitu*.

Distrib. Japan, Bonin, Formosa, China and Siberia.

C. racemosa, Pers. Syn. Pl. II, p. 270; DC. Syst. II, p. 125, et Prodr. I, p. 129; Miq. Prol. Fl. Jap. p. 200, pro parte; Franch. et Sav. Enum. Pl. Jap. I, p. 30, pro parte,

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et II, p. 275; Maxim. in Bull. Soc. Nat. Mosc. (1879) p. 4, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 49; Franch. Pl. David. I, p. 30; Forbes et Hemsl. Ind. Fl. Sin. I, p. 38; Henry, List Pl. Formos. p. 17.

Fumaria racemosa, Thunb. in "Nov. Act. Petrop. XII, 103, t. B"; Willd. Sp. Pl. III, p. 864.

INSULA UTCHINÂ: in tractu Kundjan (*Tashiro*! April. 1887, flor. et fructif.).

ARCHIPELAGO YÊMA (*Tashiro*! April. 1887, flor. et fructif.).

DISTRIB. Japan, Formosa and China.

This species differs from *C. pallida*, Pers. by having much smaller flowers, which, according to Sir J. D. Hooker, have a "small bag-like spur"; from *C. Raddeana*, Regel, by the linear, pendulous capsules, about 25 mm. long, and by very short pedicels, about $\frac{1}{10}$ the length of the capsules, while the latter species have oblong-linear or obovate-linear capsules, about 12 mm. long, and the pedicels about half the length of the capsules.

C. incisa, Pers. Syn. Pl. II, p. 269; DC. Syst. II, p. 121, et Prodr. I, p. 127; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 173; Miq. Prol. Fl. Jap. p. 200; Maxim. in Bull. Soc. Nat. Mosc. (1879) p. 4; Franch. et Sav. Enum. Pl. Jap. I, p. 30, et II, 274; Forbes et Hemsl. Ind. Fl. Sin. I, p. 37.

C. japonica, Sieb. ex Miq. Prol. Fl. Jap. p. 200.

Fumaria incisa, Thunb. in "Nov. Act. Petrop. XII, p. 104, t. D"; Willd. Sp. Pl. II, p. 859.

INSULA UTCHINÂ: in tractu Kundjan (*Tashiro*! April. 1887, flor. et fructif.).

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DISTRIB. Japan and China.

In the Shitsumon Honzō, Gwaihen, I, t. 15, there is an illustration of another species of *Corydalis* with tuberous rhizome.

CRUCIFERÆ.

Nasturtium, R. Br.

N. montanum, Wall. "Cat. n. 4478 pro parte"; Hook. f. et Thoms. in Journ. Linn. Soc. V (1861) p. 139; Benth. Fl. Hongk. p. 16; Miq. Prol. Fl. Jap. p. 3; Franch. et Sav. Enum. Pl. Jap. I, p. 32; Hook. f. et Anders. in Hook. f. Fl. Brit. Ind. I, p. 134; Franch. Pl. David. I, p. 31; Forbes et Hemsl. Ind. Fl. Sin. I, p. 40; Henry, List Pl. Formos. p. 17.

Sinapis pusilla, Roxb. Fl. Ind. III, p. 125.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*).

DISTRIB. Japan, Formosa, Hongkong, China, Corea, Burma, Java, the Himalayas and India.

Cardamine, L.

C. hirsuta, L. Sp. Pl. ed. 1, p. 655; Eng. Bot. t. 492; Willd. Sp. Pl. III, p. 486; DC. Syst. II, p. 259, et Prodr. I, p. 152; "Reichb. Ic. Fl. Germ. II, t. 26"; "Hook. Fl. Bor. Am. I, p. 45"; Ledeb. Fl. Ross. I, p. 127; Torr. et Gray, Fl. N. Am. I, p. 85; A. Gray, Man. Bot. N. Un. St. p. 67; Chapman, Fl. S. Un. St. p. 26; Benth. Fl. Hongk. p. 16; Oliv. Fl. Trop. Afr. I, p. 61; Boiss. Fl. Orient. I, p. 160; Lowe,

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Man. Fl. Madeir. I, p. 24; Maxim. in Mél. Biol. IX (1872) p. 6; Forbes et Hemsl. Ind. Fl. Sin. I, 43; Nymau, Consp. Fl. Europ. p. 36; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 80.

Subsp. flexuosa, Withering, (sp.) Brit. Pl. ed. 3, III, p. 578 (1796); Forbes et Hemsl. Ind. Fl. Sin. I, p. 43.

C. debilis, D. Don, Prodr. Fl. Nep. p. 201.

C. hirsuta, L. *var. sylvatica,* Coss. et Germ. "Fl. Envir. Par. ed. 2, p. 108 (1861)"; Hook. f. et Anders. in Hook. f. Fl. Brit. Ind. I, p. 138.

C. sylvatica, Link, in "Hoffm. Phytogr. Blatt. VII, p. 50 (1803)"; DC. Syst. II, p. 260, et Prodr. I, 152; "Reichb. Ic. Fl. Germ. II, t. 26"; Koch, Syn. Fl. Germ. ed. 2, I, p. 46; Ledeb. Fl. Ross. I, p. 127; Regel, Pl. Radd. I, p. 171; Miq. Prol. Fl. Jap. p. 5; Franch. et Sav. Enum. Pl. Jap. I, p. 35.

Insula Utchinâ (*Tashiro*! Martio 1887, flor. cum fructif.).

Insula Myâku (*Tashiro*! Julio 1887, fructif.).

Archipelago Yêma (*Tashiro*! Aug. 1887, flor. cum fruct. immat.).

Distrib. Europe, Siberia, Japan, Corea, China, the Himalayas, India, Ceylon, Africa and America.

C. impatiens, L. Sp. Pl. ed. 1, p. 655; Eng. Bot. t. 80; Lam. Encycl. I, p. 183; Willd. Sp. Pl. III, p. 485; DC. Syst. II, p. 261, et Prodr. I, p. 152; Ledeb. Fl. Alt. III, p. 40, et Fl. Ross. I, p. 128; Miq. Prol. Fl. Jap. p. 5; Fr. Schmidt, Reis. im. Amurl. p. 112; Franch. et Sav. Enum. Pl. Jap. I, p. 35; Hook. f. et Thoms. in Journ. Linn. Soc. V (1861) p. 146;

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Hook. f. et Anders. in Hook. f. Fl. Brit. Ind. I, p. 138; Nyman, Consp. Fl. Europ. p. 37; Forbes et Hemsl. Ind. Fl. Sin. I, p. 43; Franch. Pl. David. II, p. 199, "Pl. Yunn. p. 398," et "Pl. Delav. I, p. 54"; Maxim. in Mél. Biol. IX (1872) p. 9, Enum. Pl. Mong. I, p. 45, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 52.

C. pectinata, DC. Syst. II, p. 264.

INSULA UTCHINÂ: in tractu Kundjan, ad Mutubumadjiri (*Tashiro*! Martio 1887, fructif.).

DISTRIB. Europe, Persia, Afghanistan, Turkestan, Siberia, Mongolia, Japan, China and the Himalayas.

Brassica, L.

***B. oleracea,** L. Sp. Pl. ed. 1, p. 932; Lam. Encycl. I, p. 742; Lour. Fl. Cochinch. p. 841; Willd. Sp. Pl. III. p. 548; Eng. Bot. t. 637; DC. Syst. II, p. 583, et Prodr. I, p. 213; "Reichb. Ic. Fl. Germ. II, p. 97"; Nyman, Consp. Fl. Europ. p. 46; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 117.

INSULA UTCHINÂ, cult. ex *Tashiro* in litt.

DISTRIB. Europe.

***B. campestris,** L. Sp. Pl. ed. 1, p. 931; Willd. Sp. Pl. III, p. 556; "Fl. Dan. t. 550"; Eng. Bot. t. 2224; DC. Syst. II, p. 588, et Prodr. I, p. 214; "Reichb. Ic. Fl. Germ. II, t. 92"; A. Gray, Man. Bot. N. Un. St. p. 71; Hook. f. et Anders. in Hook. f. Fl. Brit. Ind. I, p. 156; Turcz. Fl. Baic. Dah. I, p. 175; Nyman, Consp. Fl. Europ. p. 46; Forbes et Hemsl. Ind. Fl. Sin. I, p. 46.

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B. Rapa, Ledeb. Fl. Ross. I, p. 216.

B. Rapa, L. *var. campestris*, Metzg. "Kohlart. p. 51"; Koch, Syn. Fl. Germ. ed. 1, p. 59 (1837); Regel, Pl. Radd. I, p. 211; Dur. et Schinz, Consp. Fl. Europ. I, pt. 2, p. 118.

LÛTCHÛ, cult. ex *Tashiro* in litt.

NOM. LUTCH.: Kabu ex *Tashiro* in litt.

DISTRIB. Europe and Siberia; commonly cultivated in Japan and China.

b) **chinensis**, T. Itō.

B. chinensis, L. Amœn. Acad. IV, p. 280; Lour. Fl. Cochinch. p. 482 (?); Lam. Encycl. I, p. 747; Willd. Sp. Pl. III, p. 550; DC. Syst. II, p. 594, et Prodr. I, p. 215; Bunge, in Maxim. Primit. Fl. Amur. p. 47; Regel. Tent. Fl. Ussur. p. 23; Fr. Schmidt, Reis. in Amurl. p. 115; Miq. Prol. Fl. Jap. p. 6; Franch. et Sav. Enum. Pl. Jap. I, p. 37; "Franch. in Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 200."

B. orientalis, Thunb. Fl. Jap. p. 261.

LÛTCHÛ, cult. ex *Tashiro* in litt.

DISTRIB. cultivated in Japan and China.

***B. juncea**, Czern. "Consp. Charkov. p. 8 (1859)"; "Cosson, in Bull. Soc. Bot. Fr. VI (1859) p. 609"; Hook. f. et Thoms. in Journ. Linn. Soc. V (1861) p. 170; Hook. f. et Anders. in Hook. f. Fl. Brit. Ind. I, p. 156; Regel, Tent. Fl. Ussur. p. 23; Maxim. Fl. Tangut. I, p. 64, Enum. Pl. Mong. I, p. 66, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 54; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 116.

B. Besseriana, Andrz. in "Ind. Sem. Hort. VII, 4868."

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Sinapis brassicata, L. "Syst. ed. 12, III, App. p. 231"; Willd. Sp. Pl. III, p. 555; Poir. Encycl. IV, p. 342; DC. Syst. II, p. 613.

S. chinensis, L. Mant. p. 95; Willd. Sp. Pl. III, p. 557; Lour. Fl. Cochinch. p. 485 (?); DC. Syst. II, p. 613, et Prodr. I, p. 219; Maxim. Primit. Fl. Amur. p. 47; Miq. Prol. Fl. Jap. p. 7; Fr. Schmidt, Reis. im Amurl. p. 115; Franch. et Sav. Enum. Pl. Jap. I, p. 38.

S. japonica, Thunb. Fl. Jap. p. 262; Willd. Sp. Pl. III, p. 558; DC. Syst. II, p. 614.

S. juncea, L. Sp. Pl. ed. 1, p. 668; DC. Syst. II, p. 612, et Prodr. I, p. 218; Boiss. Fl. Orient. I, p. 391; Franch. Pl. David. I, p. 40.

LÛTCHÛ, cult. ex *Tashiro* in litt.

NOM. LUTCH.: Takana ex *Tashiro* in litt.

DISTRIB. Cultivated in Japan, Mongolia, China, India and Africa.

Capsella, Mœnch.

C. Bursa-pastoris, Mœnch. Meth. p. 271 (1794); DC. Syst. II, p. 383, et Prodr. I, p. 177; "Reichb. Ic. Fl. Germ. II, t. 11"; Bunge, Enum. Pl. Chin. Bor. n. 32; Benth. Fl. Hongk. p. 16; Torr. et Gray, Fl. N. Am. I, p. 84; A. Gray, Man. Bot. N. Un. St. p. 73; Chapman. Fl. S. Un. St. p. 30; Ledeb. Fl. Alt. III, p. 198, et Fl. Ross. I, p. 199; Regel, Tent. Fl. Ussur. p. 22, et Pl. Radd. I, p. 201; Bunge, in Maxim. Primit. Fl. Amur. p. 46; Turcz. Fl. Baic. Dah. I, p. 172; Harv. et Sond. Fl. Cap. I, p. 31; Oliv. Fl. Trop. Afr. I, p. 68; Boiss. Fl.

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Orient. I, p. 340; Lowe, Man. Fl. Madeir. I, p. 35; Miq. Prol. Fl. Jap. p. 7; Franch. et Sav. Enum. Pl. Jap. I, p. 38; Hook. f. et Anders. in Hook. f. Fl. Brit. Ind. I, p. 159; Nyman, Consp. Fl. Europ. p. 66; Maxim. Fl. Tangut. I, p. 75, Enum. Pl. Mong. I, p. 67, et Pl. Chin. Potanin. in Act. Hort. Petrop. I, p. 58; Forbes et Hemsl. Ind. Fl. Sin. I, p. 48; Henry, List Pl. Formos. p. 17; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 131.

Thlaspi Bursa-pastoris, L. Sp. Pl. ed. 1, p. 647; Thunb. Fl. Jap. p. 259; "Fl. Dan. t. 729"; Eng. Bot. t. 1485; Lam. Illustr. t. 557, f. 2; Willd. Sp. Pl. III, p. 447; Poir. Encycl. VII, p. 534; Franch. Pl. David. I, p. 39, et "Pl. Delav. I, p. 68."

INSULA UTCHINÂ: in tractu Kundjan ad Finidji-madjiri (*Tashiro*! Martio 1887, flor. cum fructif.).

DISTRIB. Europe, Siberia, Mongolia, Japan, Formosa, Hongkong, China, the Himalayas, India and Africa; introduced into North America.

Senebiera, Poir.

S. integrifolia, DC. in "Mem. Soc. Nat. Par. Ann. VII, p. 140, t. 8," Syst. II, p. 522, et Prodr. I, p. 202; Pers. Syn. Pl. II, p. 185; Poir. Encycl. VII, p. 76; Benth. Fl. Austral. I, p. 82; Oliv. Fl. Trop. Afr. I. p. 170; Engler, in Bot. Jahrb. VI (1885) p. 58; Maxim. in Mél. Biol. XII (1886) p. 419; Forbes et Hemsl. Ind. Fl. Sin. I, p. 48.

S. linoides, DC. Syst. II, p. 522 (excl. syn.), et Prodr. I, p. 202; Harv. et Sond. Fl. Cap. I, p. 27; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 133.

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S. pinnatifida, Henry, List Pl. Formos. p. 18 (non DC.).

Coronopus integrifolius, Spreng. Syst. II, p. 853; Prantl, in Engl. et Prantl, Natürl. Pflanzenfam. III, pt. 2, p. 161.

INSULA UTCHINÂ: in tractu Nakagan circa Tchatan (*S. Tanaka*! n. 50, 15 Majo 1891, flor. cum fructif.); in litorali Nishibara-madjiri (*Tashiro*! Majo 1887, fructif.); in tractu Kundjan ad Nagu (*Matsumura*! 1897, fructif.). Insula Tchiibishi (*Kuroiwa* ex *Makino*).

ARCHIPELAGO YÊMA: insula Ishigatchi ad Hisabu-mura (*Tashiro*! Aug. [Julio] 1887, flor. cum fructif.); insula Kuru-shima (ex *Tashiro*).

DISTRIB. Bonin Islands, Madagascar, South Africa and Eastern Australia.

Raphanus, L.

R. Raphanistrum, L. Sp. Pl. ed. 1, p. 669, et Amœm. Acad. VI, p. 448; "Fl. Dan. t. 678"; Willd. Sp. Pl. III, p. 560; Poir. Encycl. VI, p. 54; Eng. Bot. t. 856; DC. Syst. II, p. 666, et Prodr. I, p. 229; Lour. Fl. Cochinch. p. 396; Torr. et Gray, Fl. N. Am. I, p. 120; A. Gray, Man. Bot. N. Un. St. p. 75; Boiss. Fl. Orient. I, p. 401; Lowe, Man. Fl. Madeir. I, p. 41; Franch. et Sav. Enum. Pl. Jap. I, p. 39; Forbes et Hemsl. Ind. Fl. Sin. I, p. 49; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 157.

Raphanistrum innocuum, Medik. in "Ust. n. Ann. II, p. 39"; Ledeb. Fl. Ross. I, p. 225; Miq. Prol. Fl. Jap. p. 7; Nyman, Consp. Fl. Europ. p. 29.

LÛTCHÛ (*Carpenter* sec. *Forbes* et *Hemsl.*).

INSULA I-hyâ-djima adjectu insula Utchinâ (*Tashiro*! Martio 1887, flor. cum fructif. mat.).

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DISTRIB. Europe, Siberia, temperate Asia, including Japan and Corea, to India and North Africa; introduced in America.

* **R. sativus,** L. Sp. Pl. ed. 1, p. 669; "Gærtn. Fruct. II, p. 300, t. 143"; Lam. Illustr. t. 566; Poir. Encycl. VI, p. 56; Willd. Sp. Pl. III, p. 560; Thunb. Fl. Jap. p. 263; Lour. Fl. Cochinch. p. 481; Mœnch. Meth. p. 216; DC. Syst. II, p. 663, et Prodr. I, p. 228; "Reichb. Ic. Fl. Germ. II, t. 3"; Ledeb. Fl. I, p. 225; A. Gray, Man. Bot. N. Un. St. p. 75; Benth. Fl. Hongk. p. 17; Oliv. Fl. Trop. Afr. I, p. 73; Lowe, Man. Fl. Madeir. I, p. 40; Bunge, in Maxim. Primit. Fl. Amur. p. 47; Regel, Tent. Fl. Ussur. p. 23; Fr. Schmidt, Reis. im Amurl. p. 23; Miq. Prol. Fl. Jap. p. 8; Franch. et Sav. Enum. Pl. Jap. I, p. 39; Boiss. Fl. Orient. I, p. 400; Hook. f. et Anders. in Hook. f. Fl. Brit. Ind. I, p. 166; Forbes et Hemsl. Ind. Fl. Sin. I, p. 50; Maxim. Enum. Pl. Mongol. I, p. 77; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 157.

LŪTCHŪ, cult.

NOM. LUTCH.: Daikon ex *Tashiro* in litt.

DISTRIB. Widely cultivated in Europe, Asia, Africa and America. Also commonly cultivated in Japan and China, and in the latter country, according to Forbes and Hemsley, it is often found in a wild state.

CAPPARIDEÆ.

Polanisia, Rafin.

P. viscosa, DC. Prodr. I, p. 242; Seemann, Bot. Voy. 'Herald,' p. 363; Benth. Fl. Hongk. p. 18; Maxim. in Mél.

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Biol. XII (1886) p. 419; Forbes et Hemsl. Ind. Fl. Sin. I, p. 50; Henry, List Pl. Formos. p. 18; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 164.

P. icosandra, Wight et Arn. Prodr. Fl. Ind. Or. I, p. 22 (1854); Wight, Ic. Pl. Ind. Or. t. 2.

P. orthocarpa, Hochst. in "Flora (1841) p. 43."

Cleome icosandra, L. Sp. Pl. ed. 1, p. 672; Lour. Fl. Cochinch. p. 483.

C. viscosa, L. Sp. Pl. ed. 1, p. 672; Roxb. Fl. Ind. II, p. 128; Hook. f. et Thoms. in Hook. f. Fl. Brit. Ind. I, p. 170.

Insula Utchinâ: in tractu Shimadjiri (*Tashiro*! Aug. 1887, flor. cum fruct.).

Insula Myâku (*Tashiro*, 1880, flor. cum fructif. sec. *Maximowicz*).

Archipelago Yêma: insula Ishigatchi ad pagum Hōmamura (*Tashiro*! Aug. [Julio] 1887); insula Kuru-shima (*T. Itō*, n. 1369, 15 Aug. 1894, flor. et fructif.); insula Takidun (*T. Itō*, n. 1370, 15 Aug. 1894, flor. et fructif.); insula Sutubanari (*T. Itō*, n. 1482, 15 Aug. 1894, flor. et fructif.).

Distrib. Formosa, Hongkong, China, India, Madagascar, Africa, Australia and West Indies.

Cratæva, L.

C. religiosa, Forst. "Prodr. Fl. Ins. Austral, p. 35 (1786)"; DC. Prodr. I, p. 243; Oliv. Fl. Trop. Afr. I, p. 99; Hook. f. et Thoms. in Hook. f. Fl. Brit. Ind. I, p. 172; Forbes et Hemsl. I, p. 51; Henry, List Pl. Formos. p. 18; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 177.

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C. Adansonii, DC. Prodr. I, p. 243.

C. falcata, DC. Prodr. I, p. 243; Keisuke Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, t. 10.

C. guineensis, Schum. et Thonn. "Beskr. Guin. Pl. I, p. 240."

C. lœta, DC. Prodr. I, p. 243.

C. magna, DC. Prodr. I, p. 243.

C. trifoliata, Roxb. Fl. Ind. II, p. 571.

Capparis falcata, Lour. Fl. Cochinch. p. 331.

C. magna, Lour. Fl. Cochinch. p. 331.

INSULA UTCHINÂ: ad oppidum Shui, culta (*Matsumura*! 1897, folium).

ARCHIPELAGO YÊMA: in insula Yunakuni ad montem Irabu-daki (*S. Tanaka*! n. 387, 13 Junio 1891, folium).

DISTRIB. Formosa (*Makino*! *Ōwatari*!), China, India, Madagascar and tropical Africa.

We follow Forbes and Hemsley's delimitation of species to include here both *C. falcata*, DC. and *C. magna*, DC.

VIOLARIEÆ.

Viola, L.

V. Patrinii, Ging. in DC. Prodr. I, p. 293 (1824); Benth. Fl. Hongk. p. 20; Ledeb. Fl. Ross. I, p. 245; Turcz. Fl. Baic. Dah. I, p. 181; Maxim. Primit. Fl. Amur. p. 48, et in Mél. Biol. IX (1877) p. 721, et in Bull. Soc. Nat. Mosc. 1879, p. 5; Miq. Prol. Fl. Jap. p. 84; Regel, Tent. Fl. Ussur. p. 24, et Pl. Radd. I, pp. 214 et 230; Fr. Schmidt, Reis. im

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Amurl. p. 34; Franch. et Sav. Enum. Pl. Jap. I, p. 41; Forbes et Hemsl. Ind. Fl. Sin. I, p. 53; Dur. et Schinz, Consp. Fl. Afr. I, pt. 2, p. 206.

INSULA UTCHINÂ: in Mutubu-madjiri ad montem Katsu-u-daki (*Tashiro*! Martio 1887, flor. cum fruct.).

DISTRIB. Siberia, Mandshuria, Japan, Hongkong, China, Himalaya, India and Afghanistan; naturalised in Mauritius.

The Luchuan specimens belong to *var. typica*, Maxim.

V. japonica, Langsd. ex DC. Prodr. I, p. 295; Miq. Prol. Fl. Jap. p. 86; Maxim. in Mél. Biol. IX (1877) p. 724; Franch. et Sav. Enum. Pl. Jap. I, p. 42, et II, p. 287; Forbes et Hemsl. Ind. Fl. Sin. I, p. 53; Henry, List Pl. Formos. p. 18.

V. japonica var. pekinensis, Maxim. in Bull. Soc. Nat. Mosc. 1879, p. 4.

V. kamtschatica var. pekininsis, Regel, Pl. Radd. I, p. 230.

V. mysorensis, Wall. "Cat. n. 1446."

V. Patrinii, Hook. f. et Thoms. in Hook. f. Fl. Brit. Ind. I, p. 183, etc., pro parte (non Ging.).

V. prionantha, Miq. Prol. Fl. Jap. p. 84, pro parte (non Bunge).

V. prionantha var. latifolia, Miq. Prol. Fl. Jap. p. 85.

LÛTCHÛ, sec. *Maximowicz*, *Forbes* et *Hemsl.*

INSULA UTCHINÂ (*Matsumura*! 1897, flor.): in Nishi-baru-madjiri ad montem Binnu-taki (*Tîra*! Martio 1895, flor.); in Fanidji-madjiri ad montem Djinka (*Tashiro*! Febr. 1887, flor. et fructif.).

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DISTRIB. Japan, Formosa (*Makino*!), China, Corea and India.

V. sylvestris, Kit. in "Schult. Œstr. Fl. I, p. 423."

Var. grypoceras, Maxim. in Mél. Biol. IX (1877) p. 743; Forbes et Hemsl. Ind. Fl. Sin. I, p. 55.

V. Grayi, Franch. et Sav. Enum. Pl. Jap. II, p. 288; Franch. Pl. David. I, p. 43.

V. grypoceras, A. Gray, in Perry Exped. p. 308; Franch. et Sav. Enum. Pl. Jap. I, p. 55, et II, p. 289.

V. Reichenbachiana, Franch. et Sav. Enum. Pl. Jap. I, p. 42, et II, p. 288 (non Jordan).

V. Riviviana, Franch. et Sav. Enum. Pl. Jap. I, p. 43 (non Reichb.).

V. sylvatica var. imberbis, A. Gray, Bot. Jap. in Mem. Am. Acad. n. s. VI (1859) p. 382.

INSULA UTCHINÂ: in tractu Kundjan (*Tashiro*! Martio 1887, flor.).

DISTRIB. (of species). Europe, Asia, Africa and America; *var. grypoceras,* Maxim. is found in Japan and China.

V. sp.

ARCHIPELAGO YÊMA: ad insulam Irumuti in montanis (*Tashiro*! Aug. [Julio] 1887, steril.).

Leaves triangular, obtuse, crenate-serrate, cuneate or deltoid at the base, petiole long.

This small acauline species of *Viola* is indeterminable, as the specimens collected by Tashiro being sterile.

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BIXINEÆ.

Idesia, Maxim.

I. polycarpa, Maxim. in Mél. Biol. VI (1866) p. 19; Franch. et Sav. Enum. Pl. Jap. I, p. 45; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, tt. 12 et 12 B; Bot. Mag. t. 6794; Henry, List Pl. Formos. p. 18; Matsumura, in Bot. Mag. Tokyo, XII (1898) p. 67.

INSULA UTCHINÂ: in tractu Kundjan (*Tashiro*! Martio 1877, steril.).

DISTRIB. Japan, Formosa and China.

It is interesting to note that the distribution of this monotypic genus is now known to extend to the mountainous districts of the Lûchû Islands, and also to Formosa (*vide* Kew Bulletin, 1896, p. 67) and Hupeh in China. Perhaps we might expect a discovery of this genus in the Himalayas. [T. Itō].

PITTOSPOREÆ.

Pittosporum, Banks.

P. Tobira, Ait. Hort. Kew. ed. 2, II, p. 27; DC. Prodr. I, p. 346; Bot. Mag. t. 1396; Miq. Prol. Fl. Jap. p. 272; Franch. et Sav. Enum. Pl. Jap. I, p. 44; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, t. 14; Forbes et Hemsl. Ind. Fl. Sin. I, p. 58; Henry, List Pl. Formos. p. 18.

Euonymus Tobira, Thunb. Fl. Jap. p. 99.

LÛTCHÛ (*Wright*, sec. *Forbes* et *Hemsl.*).

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INSULA UTCHINÂ: in Nâfa ad pagum Izunzatchimura (*Yamada*! Aug. 1882, steril.).

DISTRIB. Japan, Formosa (*Makino*!), Corean Archipelago and China.

P. pauciflorum β (?), Hook. et Arn. et Bot. Beech. Voy. p. 259, pro parte, ex Forbes et Hemsl. Ind. Fl. Sin. I, p. 58; Henry, List Pl. Formos. p. 18.

P. lutchuense, T. Itō, in litt.

LŪTCHŪ (*Beechey*, sec. *Forbes* et *Hemsl.*, *H. Nakagawa*! n. 56, fructif.).

INSULA AMAMI-ŌSHIMA (*Carpenter* sec. *Forbes* et *Hemsl.*): inter Nazé et Yamatohama (*T. Itō*, n. 555, 16 Julio 1894, fructif.).

INSULA UTCHINÂ (*Matsumura*! 1897, fruct. immat.): ad oppidum Shui (*T. Itō*, n. 781, 26 Julio 1894, fructif. ?).

INSULA MYÂKU: circa Gushiku (*Tatitu*! n. 1261, 25 Majo 1895, steril.).

NOM. LUTCH.: Tobiragi (O.) ex *T. Itō*.

POLYGALACEÆ.

Polygala, L.

P. sibirica, L. Sp. Pl. ed. 1, p. 702; DC. Prodr. I, p. 324; Ledeb. Fl. Ross. I, p. 269; A. W. Bennett, in Hook. f. Fl. Brit. Ind. I, p. 205, et in Journ. Bot. 1878, p. 277; Forbes et Hemsl. Ind. Fl. Sin. I, p. 61.

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Var. japonica, T. Itō.

P. japonica, Houtt. "Syst. VIII, t. 62, f. 1"; DC. Prodr. I, p. 324; Benth. Fl. Hongk. p. 45 in adnot., et Fl. Austral. I, p. 139; Miq. Prol. Fl. Jap. p. 148; Franch. et Sav. Enum. Pl. Jap. I, p. 45; Baker et Moore, in Journ. Linn. Soc. XVII, p. 379; Maxim. Fl. As. Or. Fragm. in Bull. Soc. Nat. Mosc. 1879, p. 6, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 64; Franch. Pl. David. I, p. 45, et "Pl. Delav. I, p. 78"; Henry, List Pl. Formos. p. 18; Shitsumon Honzō, Naihen, II, t. 5.

LÛTCHÛ, sec. *Bentham.*

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, flor. et fructif.): inter Yamatohama et Taken (*T. Itō, n.* 549, 16 Julio 1894, flor. cum fruct. immat.).

INSULA UTCHINÂ (*Tashiro*! Majo 1887, flor.): in Nishibara-madjiri ad montem Binnu-taki (*R. Tîra*! 1895, flor.); inter Unna et Nagu (*T. Itō*, n. 1103, 25 Aug. 1894, deflor. cum fruct. immat.).

INSULA MYÂKU: prope Gushiku (*Tatitu*! 25 Majo 1895, flor.).

ARCHIPELAGO YÊMA (*Tashiro*! Aug. [Julio] 1887, flor.): in insula Ishigatchi ad montem Suri (*Aragatchi*! Martio 1895, flor.).

DISTRIB. (of species). Siberia, Mandshuria, Japan, Formosa, China, the Himalayas, India and Australia; *var. japonica* is confined to Japan, Formosa, China and Mandshuria.

Opinions of botanists vary again with regard to the limitation of this species. Forbes and Hemsley unite *P. sibirica,* L. and *P. japonica,* Houtt., while Maximowicz (Fl. Tangut. I, pp. 79-80) keeps them separate.

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CARYOPHYLLEÆ.

Dianthus, L.

* **D. sinensis,** L. Sp. Pl. ed. 1, p. 411; DC. Prodr. I, p. 359; Bot. Mag. t. 25; Rohrb. in Linnæa, XXXVI, p. 670 (varietates); Hook. et Arn. Bot. Beech. Voy. p. 259 (var. floribus subaggregatis); Forbes et Hemsl. Ind. Fl. Sin. I, p. 63; F. N. Williams, Enum. Sp. Dianth. p. 18, n. 159, et Monogr. Gen. Dianthus, in Journ. Linn. Soc. XXIX (1893) p. 430; Maxim. Enum. Pl. Mongol. I, p. 84, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 64 (D. chinensis, auctt. plurim.).

D. Seguieri, Chaix in "Vill. Fl. Dauph. I, p. 330, pro parte"; Maxim. in Fl. As. Or. Fragm. in Bull. Soc. Nat. Mosc. 1879, p. 6; Miq. Prol. Fl. Jap. p. 8; Franch. et Sav. Enum. Pl. Jap. I, p. 45; Franch. Pl. David. I, pp. 45 et 46; Edgeworth et Hook. f. in Hook. f. Fl. Brit. Ind. I, p. 215; Ledeb. Fl. Ross. I, p. 277.

D. Schraderi, Reichb. in "Iconogr. Exot. p. 9, t. 35."

LÛTCHÛ, sec. *Hook.* et *Arn.* Cult.

DISTRIB. Europe, Siberia, China, Japan and India.

D. superbus, A. Amœn. Acad. IV, p. 272; DC. Prodr. I, p. 365; Ledeb. Fl. Alt. II, p. 137, et Fl. Ross. I, p. 533; Turcz. Fl. Baic. Dah. I, p. 197; Maxim. Primit. Fl. Amur. p. 52; Regel, Pl. Radd. I, p. 288; Miq. Prol. Fl. Jap. p. 9; Fr. Schmidt, Reis. im Amurl. p. 116; Hance, in Journ. Bot. 1882, p. 296; Franch. et Sav. Enum. Pl. Jap. I, p. 46; Franch Pl. David. I, p. 46, et in "Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 202"; Nyman, Consp. Fl. Europ. p. 104; Engler, in Bot.

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Jahrb. VI (1885) p. 57; Forbes et Hemsl. Ind. Fl. Sin. I, p. 64; F. N. Williams, Enum. Sp. Dianth. p. 15, n. 109, et Monogr. Gen. Dianthus, in Journ. Linn. Soc. XXIX (1893) p. 411; Maxim. Fl. Tangut. I, p. 81, et Enum. Pl. Mongol. I, p. 83, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 64; Miyabé, in Mem. Bost. Soc. Nat. Hist. IV (1890) p. 220; Shitsumon Honzō, Gwaihen, II, t. 25.

LÛTCHÛ, ex Shitsumon Honzō, l. c.

DISTRIB. Europe, Siberia, Mongolia, Saghalin, Japan and China.

Silene, L.

S. Tanakæ, Maxim. in Mél. Biol. XII (1888) p. 719; F. N. Williams, Rev. Gen. Silene, in Journ. Linn. Soc. XXXII (1896) p. 176.

Fortasse in LÛTCHÛ, ex *Maximowicz.*

Stellaria, L.

S. media, Cyr. "Char. Comm. p. 36"; "Vill. Hist. Pl. Dauph. III, p. 615"; DC. Prodr. I, p. 396; "Reichb. Ic. Fl. Germ. VI, t. 222"; Ledeb. Fl. Alt. II, p. 153; Fenzl, in Ledeb. Fl. Ross. I, p. 377; Koch, Syn. Fl. Germ. I, p. 102; "Hook. Fl. Bor. Am. I, p. 34"; Torr. et Gray, Fl. N. Am. I, p. 183; A. Gray, Man. Bot. N. Un. St. p. 92; Chapman, Fl. S. Un. St. p. 50; Hook. et Arn. Bot. Beech. Voy. p. 135; Seemann, Bot. 'Herald,' p. 51; Benth. Fl. Hongk. p. 23; Turcz. Fl. Baic. Dah. I, p. 228; Trautv. et Mey, Fl. Ochot. p. 22; Regel et Til.

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Fl. Ajan. p. 74; Wight, Ic. Pl. Ind. Or. t. 947; Miq. Prol. Fl. Jap. p. 11; Regel, Pl. Radd. I, pp. 381 et 389; Fr. Schmidt, Reisen im Amurl. p. 117; Franch. et Sav. Enum. Pl. Jap. I, p. 51; Boiss. Fl. Orient. I, p. 707; Edgeworth et Hook. f. in Hook. f. Fl. Brit. Ind. I, p. 230; Maxim. in Mél. Biol. IX (1873) p. 42; Nyman, Consp. Fl. Europ. p. 111; "Franch. Pl. David. I. p. 97"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 68; Miyabé, in Mem. Bost. Soc. Nat. Hist. IV (1890) p. 220.

S. monogyna, D. Don, Prodr. Fl. Nep. p. 215.

Alsine media, L. Sp. Pl. ed. 1, p. 389; Thunb. Fl. Jap. p. 127.

Holosteum succulentum, L. Amœn. Acad. III, p. 21; Willd. Sp. Pl. I. p. 89; Poir. Encyl. III, p. 56; Rœm. et Schult. Syst. II, p. 857; DC. Prodr. I, p. 393.

Insula Utchinà (*Tashiro*! Martio 1887, flor. et fructif.): circa Tumi-gushiku (*T. Itō*, n. 901, 8 Julio 1894, flor. et fructif.); inter Tchatan et Unna (*T. Itō*, n. 978, 22 Aug. 1894).

Distrib. Europe, Siberia, Tibet, Japan, China, India and Ceylon; naturalized in North America.

S. uliginosa, Murr. "Prodr. Stirp. Gœtt. p. 55 (1778)"; Koch, Syn. Fl. Germ. I, p. 103; Benth. Fl. Hongk. p. 22; Fenzl, in Ledeb. Fl. Ross. I, p. 393; A. Gray, Man. Bot. N. Un. St. p. 92, et Bot. Jap. in Mem. Am. Acad. n. s. VI (1859) p. 382; Turcz. Fl. Baic. Dah. I, p. 235; Regel, Pl. Radd. I, pp. 383 et 400; Boiss. Fl. Orient. I, 708; Maxim. Mél. Biol. IX (1873) p. 49; Miq. Prol. Fl. Jap. p. 11; Franch. et Sav. Enum. Pl. Jap. I, p. 51; Edgeworth et Hook. f. in Hook. f. Fl. Brit. Ind. I, p. 233; Nyman, Consp. Fl. Europ. p. 112;

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Forbes et Hemsl. Ind. Fl. Sin. I, p. 69; Henry, List Pl. Formos. p. 19.

S. Alsine, Hoffm. "Fl. Germ. I, p. 153"; Bunge Enum. Pl. Chin. Bor. p. 8.

S. aquatica, Poll. "Palat. p. 422"; DC. Prodr. I, p. 398; Ledeb. Fl. Alt. II, p. 156; "Hook. Fl. Bor. Am. I, p. 93"; Torr. et Gray, Fl. N. Am. I, p. 186; "A Gray, Man. Bot. N. Un. St. ed. 1, p. 62."

S. thymifolia, Wall. "Cat. n. 636."

S. undulata, Thunb. Fl. Jap. p. 185, ex Fenzl, in Ledeb. Fl. Ross. I, p. 393; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 166.

Larbræa aquatica, St. Hil. "Mem. Plac. Lib. 81"; DC. Prodr. III, p. 366; "Hook. Fl. Bor. Am. I, p. 93."

L. uliginosa, Hook. "Fl. Bor. Am. I, p. 93"; Hook. f. in Journ. Linn. Soc. I, p. 116.

LÛTCHÛ (*Tashiro*! Febr. 1887, flor. et fructif.).

DISTRIB. Europe, Siberia, Japan, Formosa, Hongkong, China, the Himalayas, North Africa and North America.

Arenaria, L.

A. serpyllifolia, L. ex Hook. et Arn. Bot. Beech. Voy. p. 259.

LÛTCHÛ, ex *Hook.* et *Arn.*

In his recent revision of the genus *Arenaria* (in Journ. Linn. Soc. XXXIII, 1898, p. 367), Dr. F. N. Williams has clearly shown that *A. serpyllifolia*, L. and *S. leptoclados*, Guss. are two distinct species; of these, *S. leptoclados*, Guss. is the only one

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hitherto known in Japan; while *A. serpyllifolia*, L. is to be found in China. Although we have no specimens from Lûchû, we beg to suggest that Hooker and Arnott's plant might be identical with the Japanese species.

Sagina, L.

S. Linnæi, Presl, "Rel. Hænks. II, p. 14 (1835)"; Fenzl, in Ledeb. Fl. Ross. I, p. 339; Regel, Pl. Radd. I, p. 424; Fr. Schmidt, Reis. im Amurl. p. 117; Maxim. in Mél. Biol. IX, (1873) p. 32; Nyman, Consp. Fl. Europ. p. 121; Forbes et Hemsl. Ind. Fl. Sin. I, p. 70; Maxim. Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 74.

Var. maxima, Maxim. in Mél. Biol. IX, (1873) p. 33; Franch. Pl. David. I, p. 50.

S. maxima, A. Gray, Bot. Jap. in Mem. Am. Acad. n. s. VI (1859) p. 382, in adnot.; Walp. Ann. VII, p. 309; Miq. Prol. Fl. Jap. p. 11; Franch. et Sav. Enum. Pl. Jap. I, p. 53.

S. procumbens, Thunb. Fl. Jap. p. 80 (non L.).

S. saxatilis, Wimm. "Fl. Silis. p. 56 (1840)"; Koch, Syn. Fl. Germ. I, p. 119.

S. sinensis, Hance, in Journ. Bot. VI (1868) p. 46.

Arenaria procumbens var. angustifolia, Hook. et Arn. Bot. Beech. Voy. p. 259?

Mœhringia seu Arenaria n. sp., A. Gray, in Perry's Exped. p. 309.

LÛTCHÛ (*Wright* ex *Maximowicz*).

INSULA UTCHINÂ (*Tashiro*! Martio 1887, flor.).

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DISTRIB. (of species). Europe, Siberia and North America; *var. maxima*, Maxim. is found in Japan, Corea, China and Mandshuria.

Drymaria, Willd.

D. cordata, Willd. ex Rœm. et Schult. Syst. Veg. V, p. 406; DC. Prodr. I, p. 395; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 359; Benth. Fl. Hongk. p. 22; Edgeworth et Hook. f. in Hook. f. Fl. Brit. Ind. I, p. 244; Forbes et Hemsl. Ind. Fl. Sin. I, p. 71; Henry, List Pl. Formos. p. 19;

D. extensa, Wall. "Cat. n. 647."

Cerastium cordifolium, Roxb. Fl. Ind. II, p. 458.

Holosteum cordatum, L. Amœn. III, p. 21, et Mant. p. 327.

LÛTCHÛ (*K. Hirasawa*! 1894, in herb. Normal School, Kagoshima).

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, steril.): inter Nazé et Yamatohama (*T. Itō*, n. 550, 16 Junio 1894).

INSULA UTCHINÂ (*Matsumura*! 1897, flor.): in tractu Kundjan (*Tashiro*! Martio 1887, steril.); in montanis ad Mutubu-madjiri (*S. Tanaka*! n. 123, 18 Majo 1891, steril.); ad montem Unna alt. ped. 500 supra mare (*Kuroiwa* ex *Makino*).

NOM. LUTCH.: Midzu-kusa (U.) ex *S. Tanaka* in sched.

PORTULACEÆ.

Portulaca, L.

P. oleracea, L. Sp. Pl. ed. 1, p. 445; Thunb. Fl. Jap.

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p. 192; Lour. Fl. Cochinch. p. 293; DC. Prodr. III, p. 353; Walp. Ann. II, p. 261; Roxb. Fl. Ind. II, p. 462; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 166; "Hook. Fl. Bor. Am. I, p. 222"; Torr. et Gray, Fl. N. Am. I, p. 196; A. Gray, Man. Bot. N. Un. St. p. 44; Chapman, Fl. S. Un. St. p. 44; Ledeb. Fl. Ross. II, p. 145; Bunge, Enum. Pl. Chin. Bor. p. 104; Seemann, Bot. Voy. 'Herald,' p. 270; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 356; Benth. Fl. Hongk. p. 127, et Fl. Austral. I, p. 169; Maxim. Primit. Fl. Amur. p. 113; Regel, Tent. Fl. Ussur. p. 64; Miq. Prol. Fl. Jap. p. 375; Franch. et Sav. Enum. Pl. Jap. p. I, p. 53; Dyer, in Hook. f. Fl. Brit. Ind. I, p. 246; "Franch. in Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 220"; Nyman, Consp. Fl. Europ. p. 253; Forbes et Hemsl. Ind. Fl. Sin. I, p. 71; Hillebrand, Fl. Hawaii. Isl. p. 39; Henry, List Pl. Formos. p. 19.

INSULA UTCHINÂ: in Nâfa ad pagum Idzunzatchi-mura (*Yamada*! Aug. 1882, fructif.).

INSULA MYÂKU, ex *T. Itō*.

DISTRIB. Europe, Siberia, Japan, Formosa, Hongkong, China, Malaya, the Himalayas, India, Africa, Australia, America and Polynesia.

TAMARISCINEÆ.

Tamarix, L.

***T. chinensis,** Lour. Fl. Cochinch. p. 182; DC. Prodr. III, p. 96; Bunge, Enum. Pl. Chin. Bor. p. 28, et "Tent. Gen. Tamar. p. 46"; Hook. et Arn. Bot. Beech. Voy. p. 186; Turcz.

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Enum. Pl. Chin. Bor. p. 151, n. 79; Maxim. Ind. Fl. Pek. in Primit. Fl. Amur. p. 471; Franch. et Sav. Enum. Pl. Jap. I, p. 54; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, t. 14; "Franch. in Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 220"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 346; Maxim. Enum. Pl. Mongol. I, p. 111.

T. gallica β chinensis, Ehrenb. in "Linnæa, II, p. 267."

T. indica, Bunge, Enum. Pl. Chin. Bor. n. 171 (non Turcz. Enum. Pl. Chin. Bor. p. 151, n. 80).

Insula Utchinâ, ex *Tashiro* in litt.

Nom. Lutch.: Gyoriu (U.) ex *Tashiro* in litt.

Distrib. Cultivated in Japan, China and Mongolia.

Forbes and Hemsley remark that there is no evidence of this species being anywhere wild in China, and that Ehrenberg was probably right in treating it as a variety of the wide spread *T. gallica*, L.

HYPERICINEÆ.

Hypericum, L.

H. patulum, Thunb. Fl. Jap. p. 295, et Ic. Pl. Jap. t. 17; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 161; DC. Prodr. I, p. 545; D. Don, Prodr. Fl. Nep. p. 218; Bot. Mag. t. 5693; Miq. Prol. Fl. Jap. p. 147; Franch. et Sav. Enum. Pl. Jap. I, p. 55; Hance, in Journ. Bot. 1878, p. 104; Dyer, in Hook. f. Fl. Brit. Ind. I, p. 254; Maxim in Mél. Biol. XI (1881) p. 161, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 76; Forbes et Hemsl. Ind.

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Fl. Sin. I, p. 73; Franch. Pl. David. II, n. 50, Pl. Yunn. p. 437," et Pl. Delav. I, p. 103; Shitsumon Honzō, Gwaihen, IV, t. 6.

H. oblongifolium, Wall. "Pl. As. Rar. t. 244" (non Choisy).

H. uralum, Buch.-Ham. in D. Don, Prodr. Fl. Nep. p. 218; Bot. Mag. t. 2375; DC. Prodr. I, p. 218.

Norysca oblongifolia, Blume, Mus. Bot. Lugd. Bat. II, p. 22, quoad syn. Don.

N. patula, Blume, Mus. Bot. Lugd. Bat. II, p. 23.

LÛTCHÛ, ex Shitsumon Honzō, l.c.

DISTRIB. Japan, China, the Himalayas and India.

H. erectum, Thunb. Fl. Jap. p. 296; DC. Prodr. I, p. 548; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 162; Miq. Prol. Fl. Jap. p. 147; Franch. et Sav. Enum. Pl. Jap. I, p. 56; Maxim. in Mél. Biol. XI (1881) p. 168; Forbes et Hemsl. Ind. Fl. Sin, I, p. 73; Miyabé, in Mem. Bost. Soc. Nat. Hist. IV (1890) p. 222; Shitsumon Honzō, Gwaihen, II, t. 13.

H. attenuatum, Fr. Schmidt, Reis. im Amurl. p. 119 (non Choisy).

LÛTCHÛ (*H. Nakagawa*! n. 147, flor.).

INSULA UTCHINÂ: in tractu Kundjan an pedem mont. Nagu-daki (*T. Itō*. n. 1104, 24 Aug. 1894, flor. cum fruct.).

DISTRIB. Kuriles, Saghalin, Japan and China.

H. japonicum, Thunb. Fl. Jap. p. 295, t. 31; DC. Prodr. I, p. 548; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 163; "Royle, Illustr. t. 24;"

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Benth. Fl. Hongk. p. 23; Miq. Prol. Fl. Jap. p. 147; Hance, in Journ. Bot. 1874, p. 259; Franch. et Sav. Enum. Pl. Jap. I, p. 56; Dyer, in Hook. f. Fl. Brit. Ind. I, p. 256; Franch. Pl. David. I, p. 73; Forbes et Hemsl. Ind. Fl. Sin. I, p. 73; Henry, List Pl. Formos. p. 19; Shitsumon Honzō, Gwaihen, II, t. 14.

H. calycatum, Jacq. ex Dyer, in Hook. f. Fl. Brit. Ind. I, p. 257.

H. mutilum, Maxim. in Mél. Biol. XI (1881) p. 171, pro parte (non L.).

H. nervatum, Hance, in Walp. Ann. II, p. 188.

H. pusillum, Choisy, in DC. Prodr. I, p. 549.

H. Thunbergii, Franch. et Sav. Enum. Pl. Jap. II, p. 300.

Brathys japonica, Blume, Mus. Bot. Lugd. Bat. II, p. 19.

B. laxa, Blume, Mus. Bot. Lugd. Bat. II, p. 19.

B. nepalensis, Blume, Mus. Bot. Lugd. Bat. II, p. 19.

LÛTCHÛ (*H. Nakagawa*! n. 163, flor.).

INSULA AMAMI-ŌSHIMA: inter Taken et Nishinakama (*T. Itō*, n. 600, 17 Julio 1894, flor. cum fruct. immat.).

INSULA UTCHINÂ: inter Tchatan et Unna (*T. Itō*, n. 977, 22 Aug. 1894, flor. et fructif.); ad pedem monte Nagudaki (*T. Itō*, n. 1105, 24 Aug. 1894, flor. et fructif.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*).

DISTRIB. Japan, Formosa, Hongkong, China, Malaya, the Himalayas, India, Australia and New Zealand.

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GUTTIFERÆ.

Garcinia, L.

* **G. spicata,** Hook. f. Journ. Linn. Soc. XIV (1875) p. 486; Vesque, in DC. Mongr. Phanerog. VIII, p. 309, et "Epharm., II, tt. 89 et 90"; Matsumura in Bot. Mag. Tōkyō, XII (1898) pt. 2. p. 67.

G. ovalifolius, Hook. f. ex Anders. in Hook. f. Fl. Brit. Ind. I, p. 269 (non Oliv.).

Xanthochymus ovalifolius, Roxb. Fl. Ind. II, p. 632; Wight et Arn. Prodr. Fl. Ind. Or. p. 102.

Stalagmites ovalifolius, G. Don, Gen. Syst. I, p. 621.

S. cambogoides, Murr. in "Comment. Gœtting. IX, 1787-88 (1789) p. 173."

Insula Amami-Ōshima: ad Nazé, culta (*T. Itō,* n. 491, 21 Julio, 1894, steril.).

Insula Utchinâ: ad oppidum Nâfa, culta (*S. Tanaka*! n. 6, 11 Majo 1891, steril.); ad oppidum Shui, cult. (*T. Itō,* n. 822, 26 Julio 1894, frf.); prope Onna cult. (*J. Matsumura*! 25 April. 1897, fl. cum. fruct.). Insula Kumi-djima, cult. ex *Tashiro* in litt.

Insula Myâku, cult. ex *Tashiro* in litt.

Archipelago Yêma, cult. ex *Tashiro* in litt.

Nom. Lutch.: Fukugi (U. O.).

Distrib. India and Ceylon.

Widely planted throughout the Archipelago.

A beautiful evergreen tree, with upright trunk and copious branches, commonly planted around houses as a protection from

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winds and fire, and the timber is employed for building purposes.

Calophyllum, L.

C. Inophyllum, L. Sp. Pl. ed. 1, p. 513; DC. Prodr. I, p. 562; Roxb. Fl. Ind. II, p. 606; Wight et Arn. Prodr. Fl. Ind. Or. p. 103; Wight, "Illustr. I, p. 128," et Ic. Pl. Ind. Or. t. 77; Hook. et Arn. Bot. Beech. Voy. pp. 60 et 260; Benth. Fl. Austral. I, p. 183; Maxim. in Mél. Biol. XII, p. 421; Anderson in Hook. f. Fl. Brit. Ind. I, p. 273; Forbes et Hemsl. Ind. Fl. Sin. I, p. 75; "King, Mater. Fl. Malay. Pen. p. 178"; Vesque "Epharm., II, t. 12," et in DC. Monogr. Phanerog. VIII, p. 544; Henry, List Pl. Formos. p. 19.

LÛTCHÛ (*Wright* ex *Vesque*).

INSULA UTCHINÂ: ad oppidum Nâfa, in luco, fruticem modicem trunco recto formans, *Weyrich* fl., *Tashiro* fructif. ex *Maximowicz*; ad Tumigusiku, cult. (*S. Tanaka*! n. 1, 13 Majo 1891, steril.); ad Yuntanza (*Matsumura*! frf.). Insula Kumi-djima, cult. ex *Tashiro* in litt.

INSULA MYÂKU, cult. (*T. Itō*, n. 1151, 9 Aug. 1894, frf.).

ARCHIPELAGO YÊMA: insula Ishigatchi ad pagum Tunusuku-mura, cult. (*S. Tanaka*! n. 271, 8 Junio, 1891, flor.); insula Kuru-shima (ex *Tashiro*).

NOMIN. LUTCH.: Yanabu (U.), Yarabu (Y.) ex *T. Itō*.

DISTRIB. Tropical Asia, East African Islands, Malay Archipelago, Australia and Polynesia.

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TERNSTRŒMIACEÆ.

Ternstrœmia, L.

T. japonica, Thunb. in Trans. Linn. Soc. II (1794) p. 335; Sieb. et Zucc. Fl. Jap. I, p. 148, t. 80; Benth. Fl. Hong. p. 27; Miq. Prol. Fl. Jap. p. 202; Dyer, in Hook. f. Fl. Brit. Ind. I, p. 280; Keisuké Itō et Hika Kaku, Ic. et Descr. Hort. Koishikawa, II, p. 18, t. 19; Engler, Bot. Jahrb. VI, p. 60; Forbes and Hemsl. Ind. Fl. Sin. I, p. 75; Henry, List Pl. Formos. p. 19.

Cleyera japonica, Thunb. Fl. Jap. p. 224; DC. Prodr. I, p. 524 (non Sieb. et Zucc.).

Taonabo japonica, Szysz. in Engl. et Prantl, Natürl. Pflanzenfam. III, pt. 6, p. 188.

LÛTCHÛ (*Wright* fide *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA: ad Miyamantō inter Yamatohama et Taken (*T. Itō,* n. 644 et n. 697, 17 Julio 1894).

INSULA UTCHINÂ: in tractu Kundjan ad montem Unna (*T. Itō,* 1053, 23 Aug. 1894, fructif.).

NOM. LUTCH.: Akagi (O.) ex *T. Itō.*

DISTRIB. Widely spread over India from Ceylon and the Western Peninsula to Sumatra, and northward to China, Hongkong, Formosa and Japan.

Adinandra, Jack.

A. Millettii, Benth. et Hook. f. Gen. Plant. I, p. 183;

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Maxim. in Mél. Biol. XII (1886) p. 421; Forbes et Hemsl. Ind. Fl. Sin. I, p. 76.

Cleyera Millettii, Hook. et Arn. Bot. Beech. Voy. p. 171, t. 33.

LÛTCHÛ (*K. Hirasawa*! 1894, flor. in herb. Normal School, Kagoshima).

INSULA AMAMI-ŌSHIMA (*Tashiro* fide *Maximowicz*).

INSULA UTCHINÂ: in tractu Kundjan in montanis (*Tashiro*! Martio 1887, frf., *Matsumura*! 1897, fl.); monte Nagu-daki (*T. Itō* n. 1106, 24 Aug. 1894, flor. et fructif.); in Ufura ad pedem monte Nagu-daki (*S. Tanaka*! n. 159, 20 Majo 1891, deflor.).

DISTRIB. China.

Cleyera, Thunb.

C. japonica, Thunb. Fl. Jap. p. 12; Sieb. et Zucc. Fl. Jap. I, p. 153, t. 81; Miq. Prol. Fl. Jap. p. 202; Franch. et Sav. Enum. Pl. Jap. I, p. 57; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, p. 19, t. 20.

LÛTCHÛ (ex *Keisuké Itō*): insula Utchinâ in tractu Kundjan (*Tashiro*! April. 1887 frf., *Matsumura*! 1897, fl.).

DISTRIB. Japan.

Eurya, Thunb.

E. japonica, Thunb. Fl. Jap. p. 191, t. 25; DC. Prodr. I, p. 525; Hook. et Arn. Bot. Beech. Voy. p. 260; Benth. Fl. Hongk. p. 28; Blume, Mus. Bot. II, p. 105; Miq. Prol. Fl. Jap.

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p. 202; Dyer, in Hook. f. Fl. Brit. Ind. I, p. 284; Franch. et Sav. Enum. Pl. Jap. I, p. 57; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, p. 20, t. 21; Forbes et Hemsl. Ind. Fl. Sin. I, p. 77; Henry, List Pl. Formos. p. 19.

var. *α.* **Thunbergii,** Thwaites, "Enum. Pl. Zeyl. p. 41"; Dyer, in Hook. f. Fl. Brit. Ind. I, p. 284.

E. tristyla, Wight et Arn. Prodr. Fl. Ind. Or. I, p. 86.

E. Wightiana, Wight "Illustr. I, t. 38" (non Wall.).

LÛTCHÛ (ex *Hook.* et *Arn.*, *Wright* fide *Forbes* et *Hemsl.*).

INSULA UTCHINÂ: ad Kushi-madjiri in montanis (*Tashiro*! April. 1887, frf.); tractu Kundjan monte Unna (*T. Itō*, n. 1055, 23 Aug. 1894, fructif.).

ARCHIPELAGO YÊMA: insula Yunakuni ad pagum Sunaimura monte Urabu-daki (*S. Tanaka*! n. 389 et n. 390, 13 Junio 1891, fructif.).

DISTRIB. Japan, Formosa (*Makino*!), South China to India, and also in the Fiji Islands.

var *β.* **nitida,** Dyer, in Hook. f. Fl. Brit. Ind. I, p. 284.

E. nitida, Korth. "Verh. Nat. Gesch. Bot. p. 115, t. 7."

INSULA UTCHINÂ: in tractu Kundjan (*Tashiro*! Majo 1887, fl).

ARCHIPELAGO YÊMA: insula Irumuti ad pagum Nakamamura (*Kuroiwa* ex *Makino*).

DISTRIB. India and the Malay Islands.

E. chinensis, R. Br. in "Abel's Voy., Append. p. 379 cum ic."; DC. Prodr. I, p. 525; Blume, Mus. Bot. Lugd. Bat. II,

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p. 108; Seemann, Bot. Voy. 'Herald,' p. 366; Miq. Prol. Fl. Jap. p. 203; Dyer, in Hook. f. Fl. Brit. Ind. I, p. 285; Franch. et Sav. Enum. Pl. Jap. I, p. 58; Engler, Bot. Jahrb. VI (1885) p. 60; Forbes et Hemsl. Ind. Fl. Sin. I, p. 76; Kanitz, Anthophyta Jap. in Természetrajzi Füzetek, 1878, [p. 25].

E. littoralis, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 163.

INSULA AMAMI-ŌSHIMA inter Nazé et Yamatohama (*T. Itō*, n. 551, 16 Julio 1894, fructif.).

INSULA UTCHINÂ (*Tashiro*! Majo [April.] 1887, frf.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*).

DISTRIB. Japan, Corea, China, Hongkong and Ceylon.

E. sp. (affine *E. acuminata*, DC.).

INSULA AMAMI-ŌSHIMA: in montanis (*Tashiro*! Sept. [Febr.] 1887 fl.), ad Nazé (*S. Tanaka*! n. 449, 28 Aug. 1891, cult.; *T. Itō*, n. 529, 21 Julio 1894).

INSULA UTCHINÂ: tractu Kundjan in montanis (*Tashiro*! April. et Majo 1887, fl. et frf., *Matsumura*! 1897, frf.).

ARCHIPELAGO YÊMA: in montanis (*Tashiro*! Aug. [Julio] 1887, frf.); insula Irumuti ad pagum Sunai-mura (*S. Tanaka*! n. 327, 15 et 16 Junio 1891, steril.).

NOM. LUTCH.: Nata-oregi (O.) ex *S. Tanaka* et *T. Itō*.

Stachyurus, Sieb. et Zucc.

S. præcox, Sieb. et Zucc. Fl. Jap. I, p. 43, t. 18; Miq. Prol. Fl. Jap. p. 204; Franch. et Sav. Enum. Pl. Jap. I, p. 59; Engler, Bot. Jahrb. VI, p. 60; Forbes et Hemsl. Ind. Fl. Sin.

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I, p .79; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, p. 23, t. 24; Maxim. in Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 77.

S. himalaicus, Hook. f. et Thoms. apud Benth. in Journ. Linn. Soc. V, p. 55; Dyer, in Hook. f. Fl. Brit. Ind. I, p. 288; Franch. Pl. David. II, n. 54 (cum ?).

LÛTCHÛ (*Wright* fide *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, steril.): inter Nishinakama et Nazé (*T. Itō*, n. 717, 20 Julio 1894, fructif.).

DISTRIB. Bonin Islands! Japan, China and the eastern Himalayas.

Schima, Reinw.

S. Noronhæ, Reinw. ex "Blume Cat. Gew. Buitenz. p. 80," et Bijdr. p. 129; "Korth. in Temminck, Verh. Nat. Gesch. Bot. p. 144, t. 29, figg. 21-27"; Benth. Fl. Hongk. p. 29; Miq. Fl. Ind. Bat. I, 2, p. 492; Maxim. in Mél. Biol. XII (1886) p. 426; Forbes et Hemsl. Ind. Fl. Sin. I, p. 80; Henry, List. Pl. Formos. p. 20.

S. superba, Gardn. et Champ. in "Hook. Kew. Journ. Bot. I, p. 246"; Seemann, Bot. Voy. 'Herald,' p. 367, t. 75.

Gordonia javanica, Hook. Bot. Mag. t. 4539.

LÛTCHÛ, mis. *Tanaka* s. nom. I-dshiyu, ex *Maximowicz*.

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, fl.): ad Miyamantō inter Yamatohama et Taken (*T. Itō*, n. 601, 17 Julio 1894, fl.).

INSULA UTCHINÂ : tractu Nakagan (*Tashiro*! Majo 1887,

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fl.); Yuntanza inter Tchatan et Unna (*T. Itō*, n. 981, 22 Aug. 1894, frf., *Matsumura*! 24 April. 1897, fl.); inter Unna et Nagu (*S. Tanaka*! n. 76, sub floribus albis, 16 Majo 1891, flor.).

ARCHIPELAGO YÈMA (*Tashiro*! Aug. [Julio] 1887, frf.).

NOM. LUTCH.: Idju (U.).

DISTRIB. Bonin Islands! Formosa, Hongkong, China, Malay Archipelago and Cochin China.

The timber of this plant is employed for building.

Camellia, L.

* **C. Thea,** Link, "Enum. Pl. Hort. Bot. Berol. II (1822) p. 73; Forbes et Hemsl. Ind. Fl. Sin. I, p. 82.

C. Bohea, Griffith, Notul. IV, p. 553, et Ic. t. 602, f. 1.

C. theifera, Griffith, Notul. IV, p. 558, et Ic. t. 601, figg. 1 et 3; Dyer, in Hook. f. Fl. Brit. Ind. I, p. 292; Franch. Pl. David. I, p. 58.

C. viridis, Link, "Enum. Pl. Hort. Bot. Berol. II, p. 73."

Thea assamica, Mast. in "Journ. Agric. et Hort. Soc. Ind. III (1844) p. 63."

T. Bohea, L. "Sp. Pl. ed. 2, p. 734"; Thunb. Fl. Jap. p. 225.

T. cantoniensis, Lour. Fl. Cochinch. p. 339.

T. chinensis, Sims, Bot. Mag. t. 998; DC. Prodr. I, p. 530; "Seemann, in Trans. Linn. Soc. XXII, p. 349, t. 61"; Miq. Prol. Fl. Jap. p. 205; Franch. et Sav. Enum. Pl. Jap. I, p. 61.

T. cochinchinensis, Lour. Fl. Cochinch. p. 338.

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T. japonica, Kæmpf. Amœn. Exot. p. 605.

T. sinensis, L. Sp. Pl. ed. 1, p. 515.

T. viridis, L. "Sp. Pl. ed 2, p. 735."

INSULA AMAMI-ŌSHIMA, cult.

INSULA UTCHINÂ, cult.

ARCHIPELAGO YÊMA, cult. ex *Tashiro* in litt.

NOM. LUTCH.: Tcha, ex *Tashiro* in litt.

DISTRIB. India; commonly cultivated in Japan, Formosa and China.

C. japonica, L. Sp. Pl. ed. 1, p. 698; DC. Prodr. I, p. 529; Sieb. et Zucc. Fl. Jap. I, p. 158, t. 83; Seemann, in "Trans. Linn. Soc. XXII, p. 341", et in Journ. Bot. IV (1868) p. 1, t. 42 (var. foliis variegatis); Bot. Mag. t. 42; Miq. Prol. Fl. Jap. p. 204; Franch. et Sav. Enum. Pl. Jap. I, p. 60; Keisuké Itō et Hika Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, p. 26, t. 27; Forbes et Hemsl. Ind. Fl. Sin. I, p. 81.

INSULA AMAMI-ŌSHIMA (*Carpenter* fide *Forbes* et *Hemsl.*).

INSULA UTCHINÂ (*Matsumura*! 1897, steril.): tractu Kundjan monte Nagu-daki (*T. Itō*, n. 1107, 8 Aug. 1894, frf.).

ARCHIPELAGO YÊMA (*Tashiro*! Aug. [Julio] 1887, fl.): insula Kuru-shima (fide *Tashiro*).

NOM. LUTCH.: Tchibatchi (U.), Tchibaki (Y.) ex *T. Itō*.

DISTRIB. Japan and China.

C. Sasanqua, Thunb. Fl. Jap. p. 273, t. 30; Sieb. et Zucc. Fl. Jap. I, p. 158, t. 83; Miq. Prol. Fl. Jap. p. 204; Franch. et Sav. Enum. Pl. Jap. I, p. 60; Keisuké Itō et Hika

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Kaku, Ic. et Descr. Pl. Hort. Koishikawa, II, p. 28, t. 29; Forbes et Hemsl. Ind. Fl. Sin. I, p. 82; Bot. Mag. t. 5152 (var. anemoniflora); "Bot. Regist. t. 12 (1815) et t. 1091 (1827); "Seemann, in Trans. Linn. Soc. XXII, p. 343"; Hance, in Journ. Linn. Soc. 1879, p. 9.

LÛTCHÛ (*Wright* fide *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA: ad Miyamanto inter Yamato-hama et Taken (*T. Itō*, n. 602, 17 Julio 1894, fructif.).

NOM. LUTCH.: Yama Tchibatchi (U.) ex *T. Itō*.

DISTRIB. Japan and China.

C. sp. (an *C. euryoides*, Lindl.?).

LÛTCHÛ (*K. Hirasawa*! 1894, in Herb. Normal School, Kagoshima).

INSULA UTCHINÂ (*Matsumura*! 1897, steril.): in tractu Kundjan ad Unna (*Tashiro*! Martio 1887, steril.) nec non inter mont. Nagu-daki et Kushi (*S. Tanaka*! n. 160, 20 Majo 1891, fl. juven.); inter Nagu et Unna (*T. Itō*, n. 1108, 25 Aug. 1894, frf. mat.).

ARCHIPELAGO YÊMA ex *S. Tanaka* in litt.

General habits of *Eurya japonica*, Thunb. *var. Thunbergii*, Thwaites, but may at once be distinguished from that by its flowers and fruits. Leaves oblong-elliptical or obovate, 4½-9½ cm. long, 1-3½ cm. wide., acuminate, tapering toward the base, crenate-serrate. Flower-buds ½ cm. diam. subsessile, sepals unequal, rotundate, outside sericeo-pilose, naked within. Capsule leathery, rough, naked, pyriform, about 2 cm. long, apiculate. Seeds angular, smooth, shining, chestnut-coloured, 1½ cm. long, ½ cm. diam.

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C. lutchuensis, T. Itō.

Arbuscula ramosa, ramulis alternis gracillimis flexuosis primum pilosis cinereis tum glabris. Folia alterna, brevissime petiolata, chartacea, elliptica, utrinque attenuata, obtiuscula minute crenato-serrata, concoloria, nitida, glaberrima, petiolis pilosis. Flores pseudoterminales vel axillares, subsessiles, parvuli, erecta (?), solitarii rarius in paribus; sepala circa 5, imbricata glabra rotundata vel ovata, acuta, obtusa vel mucronata; petala inæqualia, glabra, ovata vel rotundata, apice emarginato vel obcordato sæpe rotundato; stamina numerosa petalis breviora, filamentis planis, glabris linearibus, antheris globosis vel oblongo-globosis; stylus filiformis subglaber, trifidus, exertus. Capsula globosa apiculata lævis, 1-3-spermia. Semina globosa vel ovoidea sæpe semiovoidea, glabra, brunnea.

Insula Utchinâ (*Matsumura*! 1897, deflor.): in montanis ad Kundjan-madjiri (*Tashiro*! Majo 1887, flor.); ad montem Nagu-daki in Nagu-madjiri (*S. Tanaka*! n. 161, 20 Majo 1891, *T. Itō*, n. 1110, 24 Aug. 1894, fruct. mat.).

Archipelago Yèma in montanis (*Tashiro*! Julio 1887, flor.).

Folia 20-25 mm. longa, 10-15 mm. lata, petiolo 1-2 mm. longo. Flores vix 25 mm. diametro. Sepala 2-3 mm. longa. Petala exteriora 5 mm. longa et lata, interiora circa 7-10 mm. longa, 6-8 mm. lata. Filamentum staminis circa 5 mm. Stylus 10 mm. Capsula 10-13 mm. longa. Semina 8-9 mm. longa, 5-8 mm. lata.

Closely allied to *C. assimilis*, Champ. and to *C. gracilis*, Hemsl., but, it differs from both by its naked filaments and style, as well as by the smaller leaves.

Distrib. Endemic.

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C. sp. (an *C. drupifera*, Lour ?).

INSULA UTCHINÂ (*Matsumura*! 1897, fruct. immat.): in Hanidji-madjiri monte Djinka (*Tashiro*! Martio [April.] 1887, steril.); in tractu Kundjan in montibus Unna-daki (*T. Itō*, n. 1054, 23 Aug. 1894, frf.) et Nagu-daki (*T. Itō* n. 1109 B, 24 Aug. 1894, frf.).

The branches of this plant are slender and cylindrical, and the leaves elliptical, coriaceous, glabrous, minutely punctate on both surfaces, shining above, 3-9 cm. long, 1½-3 cm. wide, acute or subacuminate, attenuate at the base, minutely crenate-serrate, entire toward the base, veins often obscure, except the midrib; at the base of young branches, there is usually a pair of spathulate or oblanceolate scales, which are sericeous outside.

C. sp.?

LÛTCHÛ (*Tashiro*! steril.)

Leaves very small, 1½ or 2 cm. long, ¾-1 cm. wide, smooth, shining, elliptical-lanceolate, obtuse or acute, crenate-serrulate. Tashiro's specimen is too imperfect for further determination.

MALVACEÆ.

Althæa, L.

* **A. rosea,** Cav. "Diss. II, p. 92, t. 29, f. 3"; DC. Prodr. I, p. 437; "Reichb. Ic. Fl. Germ. V, t. 175"; Bot. Mag. t. 3198; Baker f. in Journ. Bot. XXVIII (1890) p. 207; Forbes et Hemsl. Ind. Fl. Sin. I, p. 83; Maxim. Enum. Pl. Mon-

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gol. p. 116, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 79.

A. caribæa, Sims, in Bot. Mag. t. 1916.

A. chinensis, Wall. "Cat. n. 2689."

A. coromandelina, Cav.; DC. Prodr. I, p. 437.

A. cretica, Weinm. "Syll. Ratisb. II, p. 171."

A. flexuosa, Sims, in Bot. Mag. t. 892.

A. meonantha, Link, in "Linnæa, IX, p. 586."

A. mexicana, Kuntze, in "Linnæa, XX, pp. 50 et 404." ?

A. pulchra, Klotsch, "Pr. Waldemar. Him. t. 26."

A. sinensis. Cav.; DC. Prodr. I, p. 437.

Alcea rosea, L. "Sp. Pl. ed. 2, p. 966"; Thunb. Fl. Jap. p. 271; Miq. Prol. Fl. Jap. p. 207; Franch. et Sav. Enum. Pl. Jap. I, p. 62; Nyman, Consp. Fl. Europ. p. 127.

LÛTCHÛ, cult. ex *Tashiro* in litt.

DISTRIB. Europe; commonly cultivated in gardens. Also cultivated in Mongolia, Japan, China and India.

Sida, L.

S. rhombifolia, L. Sp. Pl. ed. 1, p. 684; DC. Prodr. I, p. 462; Roxb. Fl. Ind. III, p. 176; Benth. Fl. Hongk. p. 32, et Fl. Austral. I, p. 196; Mast. in Hook. f. Fl. Brit. Ind. I, p. 323; Forbes et Hemsl. Ind. Fl. Sin. I, p. 85; Hillebrand, Fl. Hawai. Isl. p. 43; E. G. Baker, in Journ. Bot. 1892, p. 239; Engl. et Prantl, Natürl. Pflanzenfam, III, 6, p. 36, f. 155; Henry, List. Pl. Formos. p. 20.

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S. alba, Hook. et Arn. Bot. Beech. Voy. p. 259?

S. chinensis, Retz. "Obs. IV, p. 29."

S. philippica, DC. Prodr. I. p, 462.

INSULA AMAMI-ŌSHIMA: inter Nazé et Yamatohama (*T. Itō*, n. 552, 16 Julio 1894, fl. cum frf.).

INSULA UTCHINÂ (*Tashiro*! Majo 1887, fl., *Matsumura*! 1897, fl.): circa Nâfa (*T. Itō*, n. 902, 28 Julio 1894, flor. cum fructif.); in tractu Kundjan inter Nagu et Unna (*S. Tanaka*! n. 77, 16 Majo 1891, fl.), et in monte Nagu-daki (*T. Itō*, n. 111, 24 Aug. 1894, flor. cum fructif.).

ARCHIPELAGO YÊMA: insula Ishigatchi ad pagum Shikamura (*Kuroiwa* ex *Makino*); insula Kubama (*T. Itō*, n. 1371, 15 Aug. 1894, fruct. immat.).

DISTRIB. Common in tropical and subtropical regions of the both hemispheres.

Abutilon, Gærtn.

A. indicum, G. Don, Gen. Syst. I, p. 504; Benth. Fl. Hongk. p. 33, et Fl. Austral. I, p. 202; Mast. in Hook. f. Fl. Brit. Ind. I, p. 326; Maxim. in Mél. Biol. XII (1886) p. 426; Forbes et Hemsl. Ind. Fl. Sin. I, p. 86; Wight, Ic. Pl. Ind. Or. t. 12; Henry, List Pl. Formos. p. 21.

A. asiaticum, G. Don, Gen. Syst. I, p. 503.

A. cysticarpum, Hance, in Walp. Ann. II, p. 157.

A. graveolens, Seemann, Bot. Voy. 'Herald,' p. 365 (non Wight et Arn.).

Sida indica, L. "Sp. Pl. ed. 2, p. 964"; DC. Prodr. I, p. 471; Roxb. Fl. Ind. III, p. 179.

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S. asiatica, L. "Sp. Pl. ed. 2, p. 964"; DC. Prodr. I, p. 470; Roxb. Fl. Ind. III, p. 179.

INSULA MYÂKU (*T. Itō*, n. 1152, 9 et 17 Aug. 1894, flor. et fructif.): inter Nagama et Firara (*S. Tanaka*! n. 244, 6 Junio 1891, deflor. cum fruct.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex Tashiro).

DISTRIB. Tropical Asia, including the Bonin Islands, Formosa, China and Hongkong; also in Africa and Australia.

Urena, L.

U. lobata, L. Sp. Pl. ed. 1, p. 692; DC. Prodr. I, p. 441; Lour. Fl. Cochinch. p. 416; Roxb. Fl. Ind. III, p. 182; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 46; Benth. Fl. Hongk. p. 34; Mast. in Hook. f. Fl. Brit. Ind. I, p. 329; Forbes et Hemsl. Ind. Fl. Sin. I, p. 86; Schumann, in Engler et Prantl, Natürl. Pflanzenfam. III, 6, p. 45, f. 19 D et E; Makino, in Bot. Mag. Tōkyō, X (1896) p. 68; Gürcke in Engler, Bot. Jahrb. XVI (1893) p. 370.

var. tomentosa, Miq. "Plant. Jungh. III, p. 283," et Fl. Ind. Bat. I, pt. 2, p. 148; Gürcke in Engler, Bot. Jahrb. XVI (1893) p. 372.

U. Lappago, Smith, in "Rees, Cycl. p. 37"; DC. Prodr. p. 442.

U. tomentosa, Blume, Bijdr. p. 65.

INSULA UTCHINÂ (*Matsumura*! 1897, frf.).

INSULA MYÂKU: inter Nagama et Arazatu (*S. Tanaka*! n. 247, 6 Junio 1891, frf.).

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var. scabriuscula, Mast. in Hook. f. Fl. Brit. Ind. I, p. 329; Gürcke in Engler, Bot. Jahrb. XVI (1893) p. 373.

U. scabriuscula, DC. Prodr. I, p. 441.

Insula Amami-Ōshima (*Wahrburg* ex *Gürcke*).

Insula Utchinâ (*Tashiro*! Junio 1887, fl.): ad oppidum Shui (*Kuroiwa* ex *Makino*, an hæc var.?). Insula Kirama (*Wahrburg* ex *Gürcke*).

Archipelago Yêma: insula Kuru-shima (ex *Tashiro*, an hæc var.?).

Distrib. Widely distributed in the warmer regions of the both hemispheres.

U. sinuata, L. "Sp. Pl. ed. 2, p. 992"; DC. Prodr. I, p. 442; Lour. Fl. Cochinch. p. 417; Roxb. Fl. Ind. III, p. 182; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 46; Benth. Fl. Hongk. p. 34; Mast. in Hook. f. Fl. Brit. I, p. 329; Miq. Prol. Fl. Jap. p. 208; Franch. et Sav. Enum. Pl. Jap. I, p. 63; Forbes et Hemsl. Ind. Fl. Sin. I, p. 87; Gürcke in Engler, Bot. Jahrb. XVI (1893) p. 377; Henry, List Pl. Formos. p. 21.

U. morifolia, DC. Prodr. I, p. 442.

U. muricata, DC. Prodr. I, p. 442.

U. heterophylla, Smith, in "Rees, Cycl. p. 37"; DC. Prodr. I, p. 442.

Lûtchû (*Warburg* ex *Gürcke, K. Hirasawa*! 1894, in herb. Normal School, Kagoshima).

Insula Amami-Ōshima (*Tashiro*! Sept. 1887, fl.).

Insula Utchinâ (*Matsumura*! 1897, fl.): in tractu Kundjan ad Mutubu (*S. Tanaka*! n. 124, 18 Majo 1891, steril.).

Archipelago Yêma: insula Ishigatchi, in sylvis um-

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brosis trajectu inter pagos Shika-mura et Nagara-mura (*T. Itō*, n. 1272, 11 Aug. 1894, flor.).

DISTRIB. Tropics of the both hemispheres. Also found in Japan, Formosa and Hongkong.

Hibiscus, Medik.

H. Abelmoschus, L. Sp. Pl. ed. 1, p. 696; DC. Prodr. I, p. 452; Roxb. Fl. Ind. III, p. 202; Griff. Notul. IV, p. 521; Benth. Fl. Hongk. p. 34; Mast. in Hook. f. Fl. Brit. Ind. I, p. 342; Forbes et Hemsl. Ind. Fl. Sin. I, p. 87; Henry, List Pl. Formos. p. 21.

H. flavescens, Cav. "Diss. III, p. 164, t. 70, f. 2"; DC. Prodr. I, p. 454.

Abelmoschus moschatus, Medic. "Malv. p. 46"; Wight et Arn Prodr. Fl. Pen. Ind. Or. I, pt. 2, p. 151; Wight Ic. Pl. Ind. Or. t. 399.

INSULA AMAMI-ŌSHIMA: inter Taken et Nishinakama, cult. (*T. Itō*, n. 674, 19 Julio 1894, flor., sub flores flavi).

INSULA UTCHINÂ (*Matsumura*! 1897, frf.): ad oppidum Shui (*T. Itō*, n. 784, 26 Julio 1894, frf.).

INSULA MYÂKU: in maritimis ad pagum Firara (*S. Tanaka*! n. 245, 5 Junio 1891, flor.).

DISTRIB. Tropical and subtropical parts of Asia, including Formosa, Hongkong, China and India; also cultivated in hot countries.

H. tiliaceus, L. Sp. Pl. ed. 1, p. 694; Lour. Fl. Cochinch. p. 418; DC. Prodr. I, p. 454; Roxb. Fl. Ind. III, p. 192; Benth. Fl. Hongk. p. 35, et Fl. Austral. I, p. 218; Mast. in

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Hook. f. Fl. Brit. Ind. I, p. 343; Forbes et Hemsl. Ind. Fl. Sin. I, p. 88; Maxim. in Mél. Biol. XII (1886) p. 427; Henry, List Pl. Formos. p. 21.

Paritium tiliaceum, A. St. Hil. "Fl. Bras. Mer. I, p. 256"; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 52; Wight, Ic. Pl. Ind. Or. I, t. 7; Hook. et Arn. Bot. Beech. Voy. p. 259; Griff. Notul. IV, p. 523.

LÛTCHÛ (*H. Nakagawa*! n. 54, flor. cum fruct. immat.).

INSULA AMAMI-ŌSHIMA (*T. Itō*, n. 492, 21 Julio 1894): inter Nazé et Yamatohama (*T. Itō*, n. 553, 17 Julio 1896, flor., sub flores flavi).

INSULA UTCHINÂ (*Tashiro*! Junio 1887, flor. juven.): ad oppidum Nâfa (*S. Tanaka*! n. 3, 10 Majo 1891, fl., *Matsumura*! 1897, fl.); in Idzunzatchi-mura (*Yamada*! 22 Aug. 1882); ad Ōnu-yama (*T. Itō*, n. 843, 30 Julio 1894, fl.); ad oppidum Shui (*T. Itō*, n. 782, 27 Julio 1894, flor.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*).

NOM. LUTCH.: Yûna (U.) ex *T. Itō*.

DISTRIB. Widely distributed in tropics of the both hemispheres, usually near the coast. Also found in Formosa, China and Hongkong.

var. Hamabo, Maxim. in Mél. Biol. XII (1886) p. 427.

H. Hamabo, Sieb. et Zucc. Fl. Jap. I, p. 176, t. 93; Miq. Prol. Fl. Jap. p. 207; Franch. et Sav. Enum. Pl. Jap. I, p. 63.

INSULA AMAMI-ŌSHIMA: ad Nazé (*Tashiro*! Sept. 1887, steril.).

DISTRIB. Japan.

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H. rosa-sinensis, L. Sp. Pl. ed. 1, p. 694; Lour. Fl. Cochinch. p. 419; DC. Prodr. I, p. 448; Roxb. Fl. Ind. III, p. 194; Hook. et Arn. Bot. Beech. Voy. p. 259; Wight et Arn. Prodr. Fl. Ind. Or. I, p. 51; Bot. Mag. t. 158; Miq. Prol. Fl. Jap. p. 207; Franch. et Sav. Enum. Pl. Jap. I, p. 64; Mast. in Hook. f. Fl. Brit. Ind. I, p. 344; Henry, List Pl. Formos. p. 21.

LŪTCHŪ (fide *Hook.* et *Arnott*, *Wright* fide *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA, cult. (*T. Itō*, n. 493, 21 Julio 1894, flor.).

INSULA UTCHINÂ: ad Nâfa, culta (*S. Tanaka*! fine 1891, flor., *Matsumura*! 1897, sub "spontanea"), ad pagum Idsunzatchi-mura (*Yamada*! Aug. 1882, steril.); ad Shui, cult. (*T. Itō*, n. 783, 7 Aug. 1894, flor.).

NOMIN. LUTCH.: Akabanâ (U.) ex *T. Itō*; Bussō-kwa ex *Tashiro* in litt.

DISTRIB. Formosa and China. Often cultivated in warm countries.

H. mutabilis, L. Sp. Pl. ed. 1, p. 694; Lour. Fl. Cochinch. p. 419; DC. Prodr. I, p. 452; Roxb. Ind. III, p. 201; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 51; Thunb. Fl. Jap. p. 272; Miq. Prol. Fl. Jap. p. 207; Franch et Sav. Enum. Pl. Jap. I, p. 64; Mast. in Hook. f. Fl. Brit. Ind. I, p. 344; Maxim. in Mél. Biol. XII (1886) p. 427; Forbes et Hemsl. Ind. Fl. Sin. I, p. 87; Henry, List Pl. Formos. p. 21.

LŪTCHŪ (*Wright*, flore minore, foliis superioribus trilobus distincte regulariter crenatis, fide *Maximowicz*).

INSULA AMAMI-ŌSHIMA: ad pagum Yuwan-mura (*S. Tanaka*! 15 Aug. 1891).

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DISTRIB. Formosa and China. Commonly cultivated in Japan, China, India, and other warm countries. Also grows in Tane-ga-shima, a small island situated between Kyūshū and Amami-Ōshima (*S. Tanaka*! 25 Sept. 1891, fl., sub "spontanea").

H. syriacus, L. Sp. Pl. ed. 1, p. 695; Lour. Fl. Cochinch. p. 418; Roxb. Fl. Ind. III, p. 195; DC. Prodr. I, p. 448; Miq. Prol. Fl. Jap. p. 207; Mast. in Hook. f. Fl. Brit. Ind. I, p. 344; Franch. et Sav. Enum. Pl. Jap. I, p. 64; Thunb. Fl. Jap. p. 272; Forbes et Hemsl. Ind. Fl. Sin. I, p. 88; Henry, List Pl. Formos. p. 21.

INSULA UTCHINÂ: in Idzunzatchi-mura ad oppidum Nâfa (*Yamada*! 22 Aug. 1882, sub nom. Siru-bunrinkwa).

DISTRIB. Common in China, both wild and cultivated; also cultivated in Japan and India.

Thespesia, Soland. ex Corr.

T. populnea, Soland. ex Correa in "Ann. Mus. IX, p. 290, t. 25, f. 1 (1807); DC. Prodr. I, p. 456; Wight, Ic. Pl. Ind. Or. t. 8 (var. Rheedii, Pierre); Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 54; Miq. Fl. Ind. Bat. I, pt. 2, p. 150; Benth. Fl. Austral. I, p. 221; Mast. in Hook. f. Fl. Brit. Ind. I, p. 343; Hillebrand, Fl. Hawaii. Isl. p. 49; Baker f. in Journ. Bot. 1897, p. 51; Matsumura, in Bot Mag. Tōkyō, XI (1897) p. 77.

Hibiscus populneus, L. Sp. Pl. p. 694; Roxb. "Hort. Beng. p. 51", et Fl. Ind. III, p. 190.

H. populneoides, Roxb. Fl. Ind. III, p. 191.

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Malvaviscus populneus, Gærtn. "Fruct. II, p. 253, t. 135."

INSULA AMAMI-ŌSHIMA (ex *Tashiro*).

INSULA UTCHINÂ: ad pagum Finoko (*Matsumura*! 1897, frf.).

INSULA MYÂKU (*T. Itō*, n. 1153, 9 Aug. 1894, flor.): inter Nagama et Firara (*S. Tanaka*! n. 246, 6 Junio 1891, steril.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*).

NOMIN. LUTCH.: Tōyōna (U.), Yama-yōna (U.), Tamaburi (M.) ex *T. Itō*.

DISTRIB. Tropical Asia, Africa, Australia, Central America, West Indies and the Pacific Islands.

Gossypium, L.

***G. herbaceum**, L. Sp. Pl. ed. 1, p. 963; Thunb. Fl. Jap. p. 271; Lour. Fl. Cochinch. p. 415; DC. Prodr. I, p. 456; Roxb. "Corom. Pl. III, p. 269", et Fl. Ind. III, p. 184; Wight, Ic. Pl. Ind. Or. tt. 9 et 11; "Royle, Illustr. t. 23, f. 1"; Cav. Diss. VI, p. 310, t. 164, f. 2"; "Parlatore, Sp. di Cotoni, p. 31, t. 2"; Ledeb. Fl. Ross. I, p. 438; Oliv. Fl. Trop. Afr. I, p. 212; Mast. in Hook. f. Fl. Brit. Ind. I, p. 346; Forbes et Hemsl. Ind. Fl. Sin. I, p. 88; Maxim. Fl. Tangut. I, p. 100, Enum. Pl. Mongol. I, p. 117, et Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 80; Henry, List Pl. Formos. p. 21.

G. indicum, Lam. Encycl. II, p. 134; DC. Prodr. I, p. 456; Miq. Fl. Ind. Bat. I, pt. 2, p. 162; Miq. Prol. Fl. Jap. p. 207; Franch. et Sav. Enum. Pl. Jap. I, p. 65.

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G. album, Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 54.

G. micranthum, DC. Prodr. I, p. 456, pro parte; "Royle, Illustr. I, p. 49."

LÛTCHÛ, ubique culta.

The illustration of the Silk-cotton Tree in the Shitsumon Honzō, Suppl. t. 13, might be referred to *Eriodendron anfractuosum*, DC.

STERCULIACEÆ.

Firmiana, Marsigli.

* **F. platanifolia**, Schott et Endl. "Meletem. Bot. p. 33"; "R. Br. in Bennett, Pl. Jav. Rar. p. 235"; Walp. Repert. V, p. 104; Miq. Prol. Fl. Jap. p. 256.

Hibiscus simplex, L. "Sp. Pl. ed. 2, II, p. 997."

Sterculia platanifolia, L. f. Suppl. p. 423; DC. Prodr. I, p. 483; Benth. Fl. Hongk. p. 36; Kurz, in Journ. Bot. 1873, p. 193; Franch. et Sav. Enum. Pl. Jap. I, p. 65; Forbes et Hemsl. Ind. Fl. Sin. I, p. 90; Maxim. Pl. Chin. Potanin. in Act. Hort. Petrop. XI, p. 80; Henry, List Pl. Formos. p. 22.

S. pyriformis, Bunge, Enum. Pl. Chin. Bor. p. 9; Walp. Repert. I, p. 335.

S. tomentosa, Thunb. Ic. Pl. Jap. Decas IV, t. 8.

LÛTCHÛ, cult. ex *Tashiro* in litt.

DISTRIB. Japan, Formosa, Hongkong and China.

Heritiera, Dryand. in Ait.

H. littoralis, Dryand. in "Ait. Hort. Kew. ed 1, III,

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p. 546"; DC. Prodr. I, p. 484; Roxb. Fl. Ind. III, p. 142; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 63; Miq. Fl. Ind. Bat. I, pt. 2, p. 179; Benth. Fl. Hongk. p. 36, et Fl. Austral. I, p. 231; Mast. in Hook. f. Fl. Brit. Ind. I, p. 362; Maxim. in Engler, Bot. Jahrb. VI (1885) p. 61; Forbes et Hemsl. Ind. Fl. Sin. I, p. 90; Henry, List Pl. Formos. p. 22.

Balanopteris Tothila, Gærtn. "Fruct. II, p. 94, t. 99."

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, steril.).

INSULA UTCHINÂ: tractu Kundjan ad pagum Afa-mura (*Tashiro*! April. 1887, steril.); inter Unna et Nagu (*S. Tanaka*! n. 95, 16 Majo 1891, steril.); ad Unna (*Matsumura*! 1897, fl.).

INSULA MYÂKU (ex *Tashiro*).

ARCHIPELAGO YÊMA (*Tashiro*! Aug. [Julio] 1887, steril.).

NOM. LUTCH.: Suwōgi.

DISTRIB. Littoral in tropical Asia, Australia, Polynesia and E. Africa.

Flowers campanulate, red.

Helicteres, L.

H. angustifolia, L. Sp. Pl. ed. 1, p. 963; Lour. Fl. Cochinch. p. 530; DC. Prodr. I, p. 476; Benth. Fl. Hongk. p. 37; Mast. in Hook. f. Fl. Brit. Ind. I, p. 365; Forbes et Hemsl. Ind. Fl. Sin. I, p. 90; Henry List Pl. Formos. p. 22.

H. lanceolata, DC. Prodr. I, p. 476.

Oudemansia integerrima, Miq. "Pl. Jungh. I, p. 296."

O. *integerrima var. angustifolia*, Hassk. Hort. Bong. I, p. 94.

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Insula Utchinâ (*Matsumura*! 1897, fl. et frf.): tractu Nakugan (*Tashiro*! Majo 1887, fl.); Unna et Nagu (*T. Itō*, n. 1056 et n. 1057, 22 et 24 Aug. 1894, flor. et fructif.).

Archipelago Yêma: insula Irumuti ad pagum Takanamura (*S. Tanaka*! n. 329, 20 Junio 1891, frf.).

Distrib. From Formosa (*Makino*!), the Philippines, Hongkong, and southern China, to the Malay Peninsula and Archipelago.

Melochia, L.

M. corchorifolia, L. Sp. Pl. ed. 1, p. 675; Willd. Sp. Pl. III, p. 604; Roxb. Fl. Ind. III, p. 139; Benth. Fl. Austral. I, p. 235; Mast. in Hook. f. Fl. Brit. Ind. I, p. 374; Forbes et Hemsl. Ind. Fl. Sin. I, p. 91; Makino, Ill. Fl. Jap. t. 7; Henry, List Pl. Formos. p. 22.

M. concatenata, L. Sp. Pl. ed. 1, p. 675.

M. supina, L. Sp. Pl. ed. 1, p. 675.

M. truncata, Willd. Sp. Pl. III, p. 601.

Riedlea concatenta, DC. Prodr. I, p. 492.

R. corchorifolia, DC. Prodr. I, p. 491; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 66.

R. supina, DC. Prodr. I, p. 491.

Visenia concatenata, Spreng. Syst. III, p. 30.

V. corchorifolia, Spreng. Syst. III, p. 30.

V. supina, Spreng. Syst. III, p. 30.

Insula Utchinâ (*Tashiro*! April. 1887, fl.).

Insula Myâku (*Tashiro*! Julio 1887, fl.).

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ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*).

DISTRIB. A common tropical plant; also spread into Japan, Formosa and China.

TILIACEÆ.

Triumfetta, L.

T. rhomboidea, Jacq. "Enum. Pl. Carib. p. 22," et "Select. Stirp. Am. p. 147, t. 90"; DC. Prodr. I, p. 507; Mast. in Hook. f. Fl. Brit. Ind. I, p. 395; Forbes et Hemsl. Ind. Fl. Sin. I, p. 93; Henry, List Pl. Formos. p. 23; Makino, in Bot. Mag. Tōkyō, IX (1895) p. 257.

T. angulata, Lamk. Encycl. III, p. 421; Wight Ic. Pl. Ind. Or. t. 320; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 74; Benth. Fl. Hongk. p. 41.

T. Bartramia, L. "Syst. ed. 10, p. 1044"; Roxb. Fl. Ind. II, p. 463.

T. trilocularis, Roxb. Fl. Ind. II, p. 462.

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, steril.).

INSULA UTCHINÂ (*Matsumura*! 1897, fl.).

INSULA MYÂKU (*Tashiro*! Aug. 1887, fl.).

ARCHIPELAGO YÊMA (*Tashiro*! Aug. 1887, steril.): insula Irumuti ad pagum Sunai-mura (*S. Tanaka*! n. 330, 15 et 12 Junio 1891, planta minor); insulis Kurushima et Hatiruma (ex *Tashiro*); insula Ishigatchi ad pagum Shika-mura (*Kuroiwa* ex *Makino*).

DISTRIB. Tropical and subtropical Asia, including

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Formosa (*Makino*!), south-eastern China and India; also in tropical Africa, America and the Malay Islands.

T. procumbens, Forst. "Prodr. Fl. Ins. Austral. p. 35"; DC. Prodr. I, p. 508; Hook. et Arn. Bot. Beech. Voy. p. 60; Hemsl. in Journ. Bot. 1890, p. 2 (non Benth. Fl. Austral. I, p. 273, nec auct. alior., saltem pro maxima parte).

T. crassifolia, Solander, "Prim. Fl. Pacif. p. 250," et in "Parkins. Drawings of Tahit. Pl. t. 51, ined."; Seemann, Fl. Vit. p. 26.

T. Fabreana, Gaud. "Bot. Voy. Freyc. p. 478, t. 102," fide Hemsl. l.c.

Archipelago Yèma: insula Hatiruma (*Tashiro*! Julio 1887, frf.).

Distrib. Malay Archipelago, Western Polynesia, Fritzroy Island, the Seychelles, Diego Garcia and the Keeling Islands.

This is an interesting discovery. The whole plant densely villous, the stem being procumbent, with long-petioled rotundate or ovate obtusely 1- or tri-lobed crenate or crenate-dentate leaves, nearly naked above, but densely pubescent and grayish below. Fruits globose, ⅓-½ inch diam., with many densely villous prickles, which are distinctly dilated at the base.

Tashiro's specimen is closely allied to *T. semitriloba,* L., but can be distinguished by its stem being softly pubescent and never hispidulous, by its fruits provided with many long prickles, which are dilated at the base, as well as densely villous and never glabrous.

T. annua, L. Mant. p. 73; DC. Prodr. I, p. 507; Miq.

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Fl. Ind. Bat. I, pt. 2, p. 196; Mast. in Hook. f. Fl. Brit. Ind. I, p. 396; Bot. Mag. t. 2296.

T. trichoclada, Link, "Enum. Hort. Berol. II, p. 5"; DC. Prodr. I, p. 507; Franch. et Sav. Enum. Pl. Jap. I, p. 66.

T. indica, Lamk. Encycl. III, p. 420? ex DC. l.c.

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, fl. et frf.).

DISTRIB. Asia, including Japan and India; also in the Malay Islands and Tropical Africa.

Corchorus, L.

C. acutangulus, Lamk. Encyl. II, p. 104; DC. Prodr. I, p. 505; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 73; Wight, Ic. Pl. Ind. Or. t. 739; Benth. Fl. Hongk. p. 40, et Fl. Austral. I, p. 277; Maxim. in Mél. Biol. XII (1886) p. 428; Griseb. Fl. Brit. W. Ind. Isl. p. 97; Mast. in Hook. f. Fl. Brit. Ind. I, p. 398; Forbes et Hemsl. Ind. Fl. Sin. I, p. 93; Henry, List Pl. Formos. p. 23.

C. fuscus, Roxb. "Hort. Beng. p. 42," et Fl. Ind. II. p. 582.

LŪTCHŪ (*H. Nakagawa*!).

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, fl. et frf.).

INSULA UTCHINÂ: tractu Nakugan (*Tashiro*! Junio 1887, fl. et frf.).

INSULA MYÂKU (*Tashiro*! Julio 1887, fl. et frf., *T. Itō*, n. 1154, 9 Aug. 1894, fl.).

ARCHIPELAGO YÊMA (*Tashiro*! Aug. 1887, fl.): insula Kuru-shima (ex *Tashiro*).

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DISTRIB. Tropical and subtropical Asia, including Formosa (*Makino* !), Hongkong and India; also in Tropical Africa, Australia and the West Indies.

Elæocarpus, L.*

E. decipiens, Hemsl. in Forbes et Hemsl. Ind. Fl. Sin. I, p. 94; Henry, List Pl. Formos. p. 24.

E. photiniæfolius, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 164; Miq. Prol. Fl. Jap. p. 205; Franch. et Sav. Enum. Pl. Jap. I, p. 67 (non Hook et Arn.).

LÛTCHÛ (*Wright* fide *Forbes* et *Hemsl.*).

INSULA UTCHINÂ: ad oppidum Shui (*T. Itō,* n. 785, 26 Julio 1894, fl.).

DISTRIB. Japan, Formosa and China.

E. japonicus, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 165; Miq. Prol. Fl. Jap. p. 205; Franch. et Sav. Enum. Pl. Jap. I, p. 67; Maxim. in Engler, Bot. Jahrb. VI (1885) p. 61; Forbes et Hemsl. Ind. Fl. Sin. I, p. 95.

LÛTCHÛ (*Wright* fide *Forbes* et *Hemsl.*).

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* Observ. An allied genus ECHINOCARPUS, Bl., though represented by two species in China and by one in Formosa, has never been discovered within our limits. As there seems, however, to occur a little confusion in the nomenclature of the Chinese species, published some years ago by Mr. Hemsley, I may venture to make the following suggestion:—

1. **Echinocarpus sinensis,** Hance, in Journ. Bot. 1884, p. 108.
   Hab. in China: Kwangtung, Lofaushan (*Faber* fide *Hance*).
2. **E. Hemsleyanus,** T. Itō.
   E. sinensis, Hemsl. in Annals of Bot. IX (1895) p. 147 (non *Hance*).
   Hab. in China: Hupeh (*A. Henry* fide *Hemsl.*).

Schumann (in Engler and Prantl's Natürlich. Pflanzenfam. III, 6, p. 5), however, includes this genus into *Sloanea,* L. [T. Itō].

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INSULA AMAMI-ŌSHIMA (*Doederlein* fide *Maximowicz*): inter Nishinakama et Nazé (*T. Itō*, n. 718, 20 Julio 1894, frf.).

INSULA UTCHINÂ (*Tashiro*! Majo 1887, fl. et fruct. immat., *Matsumura*! 1897, deflor.): in tractu Kundjan monte Unna-daki (*T. Itō*, n. 1086, 23 Aug. 1894, frf.).

ARCHIPELAGO YÉMA (*Tashiro*! Julio 1887, frf.): in insula Ishigatchi monte Suri (*Aragatchi*! 21 Martio 1895, flor.).

NOM. LUTCH.: Susadjin (Y.) ex *Aragatchi* in litt.

DISTRIB. Japan.

MALPIGHIACEÆ.

Tristellateia, Thouars.

T. australasica, A. Rich. "Sert. Astrol. p. 38, t. 15"; Benth. Fl. Austral. I, p. 286; Hook. f. Fl. Brit. Ind. I, p. 418; Matsumura, in Bot. Mag. Tōkyō, XII (1898) p. 2; Henry, List Pl. Formos. p. 24.

Platynema laurifolium, Wight et Arn. in Edin. New Phil. Journ. 1833, p. 179, et Prodr. Fl. Pen. Ind. Or. I, p. 107.

INSULA UTCHINÂ: ad marginem lacus Kezazi (*Matsumura*! Majo 1897, fl.).

DISTRIB. Singapore, eastwards to New Ireland.

GERANIACEÆ.

Oxalis, L.

O. corniculata, L. Sp. Pl. ed. 1, p. 435; Thunb. Fl. Jap.

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p. 187; Lour. Fl. Cochinch. p. 285; Hook. et Arn. Bot. Beech. Voy. p. 261; DC. Prodr. I, p. 692; Benth. Fl. Hongk. p. 56, et Fl. Austral. I, p. 301; Roxb. Fl. Ind. II, p. 457; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 142; Wight, Ic. Pl. Ind. Or. t. 18; Miq. Prol. Fl. Jap. p. 271; Franch. et Sav. Enum. Pl. Jap. I, p. 69; Forbes et Hemsl. Ind. Fl. Sin. I, p. 99; Franch. Pl. David. I, p. 65; Hillebrand, Fl. Hawaii. Isl. p. 59; Henry, List Pl. Formos. p. 24.

Lûtchû (*H. Nakagawa*! fructif.).

Insula Utchinâ (*Tashiro*! Majo 1887, fl. et frf.): ad Nâfa (*T. Itō*, n. 844, 4 Aug. 1894, flor.); inter Nâfa et Tchatan (*T. Itō*, n. 953, 22 Aug. 1894, fructif.); ad oppidum Shui (*Matsumura*! 1897, fl.).

Insula Myâku (*T. Itō*, n. 1155, 17 Aug. 1894, frf.). Insula Irabu proxime insula Myâku (*T. Itō*, n. 1208, 17 Aug. 1894, flor. et fructif.).

Archipelago Yêma: insula Kuru-shima (ex *Tashiro*, *T. Itō*, n. 1372, 15 Aug. 1894, flor. et fructif.).

Nomin. Lutch.: Târâgwâ-gusa (U.), Nyâtsuku (M.) ex *T. Itō*.

Distrib. Cosmopolitan in warm countries.

* **O. violacea,** L. (?) Sp. Pl. ed. 1, p. 433; Willd. Sp. Pl. II, p. 786; "Thunb. Diss. Oxal. p. 12"; "Jacq. Oxal. p. 93, t. 56"; DC. Prodr. I, p. 695; Bot. Mag. t. 2215; Lamk. Encycl. IV, p. 686; A. Gray, Man. Bot. N. U. St. p. 109.

Lûtchû, cult. (*S. Tanaka*! 1891, steril. sub "introduced from China about 20 years ago").

Nom. Lutch: Yawata, ex *S. Tanaka* in litt.

Distrib. America.

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Mr. S. Tanaka kindly sent me a specimen, which, being unfortunately sterile, is too imperfect for specific determination in this great genus. [T. Itō].

Impatiens, L.

* **I. Balsamina,** Linn. Sp. Pl. ed. 1, p. 938; Thunb. Fl. Jap. p. 327; Lour. Fl. Cochinch. p. 312; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 135; Hook. et Arn. Bot. Beech. Voy. p. 260; Hook. f. Fl. Brit. Ind. I, p. 453; Miq. Prol. Fl. Jap. p. 8; Franch. et Sav. Enum. Pl. Jap. I, p. 70; Forbes et Hemsl. Ind. Fl. Sin. I, p. 100.

Balsamina hortensis, Desf. in "Dict. Sc. Nat. III, p. 485"; DC. Prodr. I, p. 685.

LÛTCHÛ (fide *Hook.* et *Arn.*). Cult.

DISTRIB. Throughout tropical and subtropical India, Ceylon, and the Malay Islands, often only as an escape from cultivation, as it is probably in China (*conf.* Forbes et Hemsl. l.c.).

I observed this plant in Amami-Ōshima and also in the Yêma Archipelago. [T. Itō].

RUTACEÆ.

Bœninghausenia, Reichb.

B. albiflora, Reichb. "Conspect. Reg. Veg. p. 197"; Hook. f. Fl. Brit. Ind. I, p. 486; Miq. Prol. Fl. Jap. p. 209; Hance, in Journ. Bot. 1874, p. 259; Franch. et Sav. Enum. Pl. Jap.

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I, p. 71; Franch. Pl. David. I, p. 66; Forbes et Hemsl. Ind. Fl. Sin. I, p. 102.

LÛTCHÛ: specimen hujus speciei observatus est (ex *Matsumura*, in litt.).

DISTRIB. Japan, China and the Himalayas.

Evodia, Forst.

E. triphylla, DC. Prodr. I, p. 724; Hook. f. Fl. Brit. Ind. I, p. 488; Forbes et Hemsl. Ind. Fl. Sin. I, p. 104; Henry, List Pl. Formos. p. 25.

E. Lamarckiana, Benth. Fl. Hongk. p. 59; Maxim. in Mél. Biol. XII (1886) p. 428.

Fagara triphylla, Lamk. Encycl. II, p. 447.

Lepta triphylla, Lour. Fl. Cochinch. p. 82.

Zanthoxylum Lamarckianum, Cham. et Schlecht. in "Linnæa, V, p. 58."

Z. pteleæfolium, Champ. in "Kew Journ. Bot. III, p. 330."

Z. triphyllum, Wight, Ic. Pl. Ind. Or. t. 204.

LÛTCHÛ (*Wright, Matsumura*! Majo 1897, frf.).

INSULA UTCHINÂ (*Tashiro*! Majo 1887, frf.): ubique ad ostium æstuarii Nâfa, arbor 3-4 metralis, 2 Junio, fl., *Tashiro* s. n. jap. Awadan, fide *Maximowicz*; ad oppidum Shui (*T. Itō*, n. 786, 26 Julio 1894, fructif.); inter Nâfa et Tchatan (*T. Itō*, 21 Aug. 1894, fl. et fruct. immat.).

INSULA MYÂKU: inter Nagama et Arazatu (*S. Tanaka*! n. 248, 6 Junio 1891).

NOM. LUTCH.: Awadan (U.).

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DISTRIB. Bonin Islands, Formosa, the Philippine Islands, Hongkong, Hainan, Malaya and Eastern India.

E. meliæfolia, Benth. Fl. Hongk. p. 58; Hook. f. Fl. Brit. Ind. I, p. 490; Forbes et Hemsl. Ind. Fl. Sin. I, p. 104; Henry, List Pl. Formos. p. 24.

E. glauca, Miq. Prol. Fl. Jap. p. 211; Franch. et Sav. Enum. Pl. Jap. I, p. 72.

Boymia glabrifolia, Champ. in "Kew Journ. Bot. III, p. 330"; Seemann, Bot. Voy. 'Herald,' p. 370.

Megabotrya meliæfolia, Hance, in Walp. Ann. II, p. 259.

LÛTCHÛ (*Matsumura*! Majo 1897, steril.).

DISTRIB. Japan, Formosa (*Makino*!), Hongkong, China and India.

Zanthoxylum, L.

Z. Arnottianum, Maxim. in Mél. Biol. VIII (1872) p. 372.

Z. piperitum, Hook. et Arn. Bot. Beech. Voy. p. 261 (non DC.).

LÛTCHÛ (*N. Nakagawa*! n. 82, 1892, steril.).

INSULA UTCHINÂ (*S. Tanaka*! n. 78, 1891, steril.): Nagu-madjiri (*Tashiro*! Martio 1887, frf.), in Nagu (*Matsumura*! April. 1897, frf.).

INSULA MYÂKU (*Tashiro*! Julio 1887, fl. ♂), ad Gushiku (*Tatitu*! n. 1231, 25 Majo 1895); insula Irabu (*T. Itō*, n. 1209, 17 Aug. 1894, frf.).

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ARCHIPELAGO YÊMA: insula Ishigatchi trajectu inter pagos Shika-mura et Nagura-mura (*T. Itō*, n. 1273, 11 Aug. 1894, frf.); ad pagum Shika-mura (*Kuroiwa* ex *Makino*).

NOM. LUTCH.: Sansogii (M.) ex *Tatitu*.

DISTRIB. Bonin Islands!

Fagara, L.

F. nitida, Roxb. "Hort. Beng. p. 11," et Fl. Ind. I, p. 419.

Fagara piperita, Lour. Fl. Cochinch. p. 80 (nec L.).

Zanthoxylum nitidum, DC. Prodr. I, p. 727; Benth. Fl. Hongk. p. 58; Maxim. in Mél. Biol. VIII (1871) p. 2; Forbes et Hemsl. Ind. Fl. Sin. I, p. 106; Henry, List Pl. Formos. p. 25.

INSULA KUMI (ex *Tashiro*).

ARCHIPELAGO YÊMA: in montanis (*Tashiro*! Julio 1887, frf.); insula Yunakuni ad pagum Sunai-mura monte Urabu-daki (*S. Tanaka*! n. 391 A et n. 391 B, 13 Junio 1891, fructif.).

NOM. LUTCH.: Saru-gatchin (Y.) fide *S. Tanaka* in litt.

DISTRIB. Formosa (*Makino*!), Hongkong and China.

F. emarginella, Engl. in Engler et Prantl, Natürl. Pflanzenfam. III, 4, p. 118.

Zanthoxylum emarginellum, Miq. Prol. Fl. Jap. p. 210; Franch. et Sav. Enum. Pl. Jap. I, p. 73; Hemsl. in Annals Bot. IX (1895) p. 149; Henry, List Pl. Formos. p. 25.

Z. sp., Forbes et Hemsl. Ind. Fl. Sin. I, p. 108.

ARCHIPELAGO YÊMA: in montanis (*Tashiro*! Julio 1887, steril.).

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DISTRIB. Japan? Formosa, and the island of Chusan in China.

F. schinifolia, Engl. in Engler et Prantl, Natürl. Pflanzenfam. III, pt. 4, p. 118 (nec. L.).

Zanthoxylum schinifolium, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 137; Hance, in Journ. Bot. 1883, p. 296; Maxim. in Mél. Biol. VIII (1871) p. 3; Forbes et Hemsl. Ind. Fl. Sin. I, p. 107.

Z. Mantschuricum, Benn. in "Ann. Nat. Hist. ser. 3, X (1862) p. 200."

LÛTCHÛ (*H. Nakagawa*! n. 160, flor. juv.).

INSULA AMAMI-ŌSHIMA (*Tashiro*! Febr. 1887, fl.).

INSULA UTCHINÂ: in Tchatan-madjiri (*Tashiro*! Majo 1887, fl.).

DISTRIB. Japan, China and Corea.

Toddalia, Juss.

T. aculeata, Pers. Syn. Pl. I, p. 249; DC. Prodr. II, p. 83; Hook. et Arn. Bot. Beech. Voy. p. 261; Wight, et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 149; "Wight, Illustr. t. 66"; Benth. Fl. Hongk. p. 59; Hook. f. Fl. Brit. Ind. I, p. 497; Forbes et Hemsl. Ind. Fl. Sin. I, p. 108; Henry, List Pl. Formos. p. 25.

T. asiatica, Lamk. Encycl. VII, p. 693, et Illustr. II, p. 116.

T. floribunda, Wall. "Pl. As. Rar. III, p. 37."

T. nitida, Lamk. Illustr. t. 139, f. 1.

Limonia oligandra, Dalz. in "Kew Journ. Bot. II (1850) p. 258."

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Paullinia asiatica, L. Sp. Pl. ed. 1, p. 365.

Scopolia aculeata, Sm. "Ic. Ined. II, t. 34 (1790)"; Willd. Sp. Pl. I, p. 1115; Roxb. Fl. Ind. I, p. 616.

Zanthoxylum floribundum, Wall. "Cat. n. 1206," et "Pl. As. Rar. III, t. 37."

Z. nitidum, Wall. "Cat. n. 1207, ex China (non DC.)."

LÛTCHÛ (*Wright* fide *Forbes* et *Hemsley*, *H. Nakagawa*! steril., *K. Hirasawa*! 1894 in Herb. Normal School, Kagoshima).

INSULA UTCHINÂ: ad Nâfa (*Matsumura*! April. 1897, frf.); ad pagum Idzunzatchi-mura (*Yamada*! Aug. 1882); in oppidum Shui (*T. Itō*, n. 787, 26 Julio 1894, flor. juven.); ad Binnu-taki (*Tīra*! n. 759, 1895, frf.); in Natchidjin-madjiri (*Tashiro*! Julio 1887, frf.); insula Kumi (ex *Tashiro*).

INSULA MYÂKU (ex *Tashiro*).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*).

NOMIN. LUTCH.: Sarukaké (U.) fide *Tashiro*; Sarakatchi (U.) ex *T. Itō*.

DISTRIB. Formosa, Hongkong, China, the Philippine Islands, the Malay Archipelago, India and Ceylon.

I observed this plant in the islands of Myâku and Irabu. [T. Itō].

Skimmia, Thunb.

S. japonica, Thunb. Fl. Jap. pp. 4 et 62; DC. Prodr. II, p. 18; Franch. et Sav. Enum. Pl. Jap. I, p. 74.

Ilex Skimmia, Spreng. Syst. I, p. 495.

INSULA UTCHINÂ: in tractu Kundjan (*Matsumura*! Majo 1897, frf.).

DISTRIB. Japan.

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Glycosmis, Correa.

G. pentaphylla, Correa, in "Ann. Mus. Par. VI (1805) p. 386," DC. Prodr. I, p. 538; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 93; Benth. Fl. Austral. I, p. 367; Kurz, in Journ. Bot. n. s. V (1876) p. 36; Hook. f. Fl. Brit. Ind. I, p. 108; Forbes et Hemsl. Ind. Fl. Sin. I, p. 109; Henry, List Pl. Formos. p. 25.

G. arborea, DC. Prodr. I, p. 538.

G. chylocarpa, Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 45.

G. citrifolia, Lindl. in "Trans. Hort. Soc. Lond. VI (1826) p. 72"; Benth. Fl. Hongk. p. 51.

G. Retzii, Rœm. "Synop. fasc. I, p. 41."

Limonia arborea, Roxb. "Corom. Pl. t. 85," et Fl. Ind. II, p. 381; Ait. Hort. Kew. ed. 2, III, p. 43; Bot. Mag. t. 2074.

L. parvifolia, Sims, Bot. Mag. t. 2416.

Myxospermum chlylocarpum, Rœm. "Synop. fasc. I, p. 40."

Insula Utchinâ: ad oppidum Shui (*Tashiro*! Julio 1887, sterilis, *Matsumura*! Majo 1897, frf.).

Archipelago Yêma (*Tashiro*! Julio [Aug.] 1897, fl. et frf.): insula Ishigatchi ad pagum Kabira-mura (*S. Tanaka*! n. 273, 26 Junio 1891); insula Kuru-shima (ex *Tashiro*).

Nomin. Lutch.: Fana-shinbōgi (U.), Midzu-kokkwâ (Y.) ex *T. Itō.*

Distrib. Widely spread in tropical and subtropical Asia, including Formosa (*Tashiro*! *Makino*!), Hongkong, South

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China and the Philippine Islands, extending to Polynesia and Australia.

Murraya, L.

* **M. exotica,** L. Mant. Alt. p. 563; DC. Prodr. I, p. 537; Roxb. Fl. Ind. II, p. 374; Hook. et Arn. Bot. Beech. Voy. p. 260; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 94; Wight, Ic. Pl. Ind. Or. t. 96; Benth. Fl. Hongk. p. 50, et Fl. Austral. I, p. 369; "Bot. Reg. t. 434"; Oliv. in Journ. Linn. Soc. V, Suppl. 2 (1861) p. 28; Brandis, For. Fl. Ind. I, p. 502; Hook. f. Fl. Brit. Ind. I, p. 502; Maxim. in Mél. Biol. XII (1886) p. 429; Forbes et Hemsl. Ind. Fl. Sin. I, p. 109; Henry, List Pl. Formos. p. 25.

Chalcas japonensis, Lour. Fl. Cochinch. p. 271.

C. paniculata, Lour. Fl. Cochinch. p. 270.

Marsana buxifolia, Sonner. "Voy. Ind. Or. III, p. 282, t. 139 (1782)."

LÛTCHÛ (ex *Hook.* et *Arn.*, *Wright* ex *Oliver* nec non ex *Forbes* et *Hemsl.*, *Tanaka* ex *Maxim.*). Cult.

INSULA AMAMI-ŌSHIMA: ad Nazé, cult. (*T. Itō,* n. 494, 21 Julio 1894, steril.).

INSULA UTCHINÂ: ad portum Nâfa (*S. Tanaka*! n. 5, 1891, frf., cult., *T. Itō,* n. 845, 3 Aug. 1894, fl., cult.) in Idzunzatchi-mura (*Yamada*! 22 Aug. 1882, steril.); ad oppidum Shui, cult. (*T. Itō,* n. 788, 24 Julio 1894, fruct. immat.).

NOMIN. LUTCH.: Gikidji seu Gikidiâ (U.) ex *T. Itō.*

DISTRIB. Widely spread in tropical and subtropical Asia,

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including Formosa, Hongkong, South China and India; also in Australia and Polynesia; often cultivated.

Clausenia, Burm.

* **C. Wampi,** Oliv. in Journ. Linn. Soc. V, Suppl. 2, p. 184; Benth. Fl. Hongk. p. 50; Hook. f. Fl. Brit. Ind. I, p. 505; Forbes et Hemsl. Ind. Fl. Sin. I, p. 110; Henry, List Pl. Formos. p. 25; Shitsumon Honzō, Suppl. t. 8.

Cookia Wampi, Blanco, Fl. Fil. ed. 1, p. 358.

C. punctata, Sonner. "Voy. Ind. Or. III, p. 258, t. 130 (1780)"; DC. Prodr. I, p. 537; Roxb. Fl. Ind. II, p. 382.

Quinaria Lansium, Lour. Fl. Cochinch. p. 272 (1790).

LÛTCHÛ, cult. sec. Shitsumon Honzō, l.c.

DISTRIB. Cultivated for its fruit in Formosa, Hongkong, Hainan, China, India and Malaya; native country uncertain (according to Forbes and Hemsley).

Citrus, L.

C. nobilis, Lour. Fl. Cochinch. p. 466; DC. Prodr. I, p. 540; "Ker, Bot. Regist. t. 211"; "Andrew, Bot. Repert. t. 608"; Franch. et Sav. Enum. Pl. Jap. I, p. 74; Forbes et Hemsl. Ind. Fl. Sin. I, p. 111.

C. deliciosa, Tenore, "Sull. Arancio Mandarino, p. 11, cum tab."; Walp. Repert. II, p. 804.

LÛTCHÛ, cult.

INSULA AMAMI-ŌSHIMA, cult. (*S. Tanaka*! n. 452, 28 Aug. 1891, *T. Itō,* n. 497, 21 Julio 1894).

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NOM. LUTCH.: Mikan, ex *Tashiro* in litt.

Var. spontanea, T. Itō. Arbuscula ramosa, ramulis glabris, sæpe spinosis, ad apicem angulatis; foliis 5-9 cm. longis, 2-4½ cm. latis, ellipticis vel oblongo-ellipticis vel elliptico-lanceolatis interdum ovatis, coriaceis, minute glanduloso-punctatis, utrinque glabris, reticulatis, supra nitidis, subtus venis prominentibus, apice obtuso vel emarginato, crenato-serratis, petiolis 4-20 mm. longis angulatis exalatis; fructibus globosis circa 25 mm. longis, pericarpo tenui glanduloso-punctato, 7-8-locularibus, acidissimis, seminibus 4-6 cm. longis ovoideis paucis.

C. Aurantium ? *var. Tatchibana*, Makino, in Journ. Hort. Soc. Jap. (1896) p. 3, cum tab.

INSULA AMAMI-ŌSHIMA (*S. Tanaka* ! n. 458, 28 Aug. 1891, fructif., *T. Itō*, n. 529, 21 Julio 1894, fructif.): in montanis Miyamantō inter Yamatohama et Taken, sponte dicitur (*T. Itō*, n. 603 et n. 604, 17 Julio 1894, fructif.).

ARCHIPELAGO YÉMA: insula Irumuti in ripis fluminis Nakara-gâ, sponte dicitur (*T. Itō*, n. 1414, 12 Aug. 1894, fructif.). Fructus minores acidissimi.

Var. Tatchibana, T. Itō.

LÛTCHÛ, cult.

NOM. LUTCH.: Suikwâ-shâ (U.) ex *Tashiro* in litt.

DISTRIB. Japan and China.

* **C. Aurantium,** L. Sp. Pl. ed. 1, p. 782; DC. Prodr. I, p. 539; Lour. Fl. Cochinch. p. 466; Grisebach, Fl. Brit. W. Ind. Isl. p. 132; Roxb. Fl. Ind. III, p. 392; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 97; Franch. et Sav. Enum. Pl. Jap. I, p. 74; Hook. f. Fl. Brit. Ind. I, p. 515; Forbes et

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Hemsl. Ind. Fl. Sin. I, p. 110; Henry, List Pl. Formos. p. 26.

Subsp. amara, L.; Engler, in Engl. et Prantl, Natürl. Pflanzenfam. III, pt. 4, p. 198.

C. amara, Link, "Handb. II, p. 345."

C. Aurantium, L. *var. Bigaradia,* Grisebach, Fl. Brit. W. Ind. Isl. p. 132 (1864); Brandis, For. Fl. Ind. p. 53; Hook. f. Fl. Brit. Ind. I, p. 515.

C. Bigaradia, Loisel. in "Duham. Arb. ed. nov. VII, p. 99"; Franch. et Sav. Enum. Pl. Jap. I, p. 70.

C. buxifolia, Poir. in Lam. Encycl. IV, p. 580; DC. Prodr. I, p. 540.

C. sinensis, Pers. Syn. II, p. 74; DC. Prodr. I, p. 539.

C. vulgaris, Risso, in "Ann. Mus. Par. XV (1813) p. 190"; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 97.

C. vulgaris indicum, Gall. Citr. p. 122.

LŪTCHŪ, cult.

DISTRIB. Cultivated in Japan, China and India.

Subsp. sinensis, (Gall. Citr. p. 149) Engler, in Engl. et Prantl, Natürl. Pflanzenfam. III, pt. 4, p. 198.

LŪTCHŪ, cult.

NOM. LUTCH.: Kunebu (U.) ex *Tashiro.*

DISTRIB. Cultivated in Japan, Formosa, China and India; naturalised in West Indies (according to Grisebach).

Var. Decumana, Bonavia, ex Engler, in Engl. et Prantl, Natürl. Pflanzenfam. III, pt. 4, p. 198; Shitsumon Honzō, Suppl. t. 9.

C. Aurantium β sinense, L. "Sp. Pl. ed. 2, p. 1101."

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C. Decumana, Lour. Fl. Cochinch. p. 467 (1790); Willd. Sp. Pl. III, pt. 2, p. 1428 (1800); DC. Prodr. I, p. 539; Roxb. Fl. Ind. III, p. 393; Grisebach, Fl. Brit. W. Ind. Isl. p. 132; Franch. et Sav. Enum. Pl. Jap. I, p. 74; Hook. f. Fl. Brit. Ind. I, p. 516; Forbes et Hemsl. Ind. Fl. Sin. I, p. 111; Henry, List Pl. Formos. p. 26.

Insula Amami-Ōshima, cult. (*S. Tanaka*! n. 454, 28 Aug. 1891, steril., *T. Itō*, n. 496, 21 Julio 1894, fructif.).

Nom. Lutch.: Zabon (U.) ex *Tashiro* in litt.

Distrib. Native of Malaya and Polynesia (according to Hook. f.); cultivated in Japan, Formosa, China and India; naturalised in West Indies (according to Grisebach).

SIMARUBEÆ.

Picrasma, Blume.

P. quassioides, Benn. "Pl. Jav. Rar. p. 198, in adnot."; Benth. Fl. Hongk. p. 60; Planch. in "Hook. Lond. Journ. Bot. V (1846) p. 573"; A. W. Benn. in Hook. f. Fl. Brit. Ind. I, p. 520; Forbes et Hemsl. Ind. Fl. Sin. I, p. 112.

P. ailanthoides, Planch. in "Hook. Lond. Journ. Bot. V (1846) p. 573"; Walp. Ann. I, p. 167; Franch. et Sav. Enum. Pl. Jap. I, p. 75.

P. japonica, A. Gray, Bot. Jap. in Mem. Am. Acad., n. s., VI (1858-59) p. 385; Miq. Prol. Fl. Jap. p. 211.

Nima quassioides, Buch.-Ham. ex "A. Juss. in Mém. Mus. Par. XII (1825) p. 516."

Simaba quassioides, Buch.-Ham. in D. Don, Prodr. Fl. Nep. p. 248.

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Rhus ailanthoides, Bunge, Enum. Pl. Chin. Bor. p. 15.

INSULA UTCHINÂ (*Tashiro*! Junio 1887, steril.): ad oppidum Shui (*Matsumura*! 1897, steril.).

DISTRIB. Japan, China, Hongkong, Corea and the Himalayas.

BURSERACEÆ.

Canarium, L.

* **C. album**, Ræusch, "Nom. ed. 3, p. 287"; DC. Prodr. II, p. 80; Hance, in Journ. Bot. 1871, p. 39; Engler, in DC. Monogr. Phanerog. IV, p. 149; Forbes et Hemsl. Ind. Fl. Sin. I, p. 113; Shitsumon Honzō, Suppl. t. 3.

C. sinense, Rumph. "Herb. Amb. II, p. 154," sec. DC.

Pimela alba, Lour. Fl. Cochinch. p. 408.

LÛTCHÛ, culta.

INSULA UTCHINÂ, in hort. cult. ex *Tashiro* in litt.

NOM. LUTCH.: Kanran (U.) ex *Tashiro* in litt.

DISTRIB. Cochinchina; cultivated in China.

MELIACEÆ.

Melia, L.

* **M. Azedarach**, L. Sp. Pl. ed. 1, p. 385; Lamk. Encycl. t. 352; DC. Prodr. I, p. 621; Bot. Mag. t. 1066; Roxb. "Hort. Beng. p. 33," et Fl. Ind. II, p. 395; Wight et Arn. Prodr.

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Fl. Pen. Ind. Or. I, p. 117; Wight, Ic. Pl. Ind. Or. t. 160; A. Juss. in Mém. Mus. Par. XIX (1830) t. 13, f. 4"; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 544; Miq. Ann. Mus. Lugd.-Bat. IV, p. 5, et Prol. Fl. Jap. p. 212 (var. subtripinnata); Franch. et Sav. Enum. Pl. Jap. I, p. 75; C. DC. in DC. Mongr. Phanerog. I, p. 451; Forbes et Hemsl. Ind. Fl. Sin. I, p. 113; King, in Journ. As. Soc. Beng. LXIV (1895) p. 20; Shitsumon Honzō, Naihen, t. 13; Henry, List. Pl. Formos. p. 26.

M. Bukayun, Royle, "Ill. Bot. Him. p. 144."

M. japonica, G. Don, Syst. I, p. 680; Walp. Rep. V, 373; Maxim. in Bull. Soc. Nat. Mosc. 1879, p. 7.

M. sempervirens, Sw. "Prodr. Veg. Ind. Or. p. 67"; "Bot. Reg. t. 643"; "Roxb. Hort. Beng. p. 33," et Fl. Ind. II, p. 395.

Insula Utchinâ: ad portum Nâfa in Idzunzatchimura (*Yamada*! 1882).

Nom. Lutch.: Shinran (U.) ex *Yamada* in litt.

Distrib. China and India; commonly cultivated in the warmer parts of both the Old and the New Worlds.

Aglaia, Lour.

* **A. odorata**, Lour. Fl. Cochinch. p. 173; DC. Prodr. I, p. 537; Wight, Ic. Pl. Ind. Or. t. 511; Hook. et Arn. Bot. Beech. Voy. p. 174, t. 34; "A. Juss. in Mém. Mus. Par. XIX (1830) p. 245, t. 14, f. 7"; Miq. in Ann. Mus. Lugd.-Bat. IV, p. 48; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 554; C. DC. in DC. Monogr. Phanerog. I, p. 602; Maxim. in Mél. Biol. XII

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(1886) p. 429; Forbes et Hemsl. Ind. Fl. Sin. I, p. 114; King, in Journ. As. Soc. Beng. LXIV (1895) p. 62; Harms, in Engler et Prantl, Natürl. Pflanzenfam. III, pt. 4, p. 298, f. 16, A-D; Henry, List Pl. Formos. p. 26.

A. pentaphylla, Kurz, ex Miq. l.c.

Camunium chinense, Roxb. "Hort. Beng. p. 18," et Fl. Ind. I, p. 636.

C. sinense, Rumph. "Amb. V, p. 28, t. 18, f. 1."

Ophilia odorata, Spreng. Syst. I, p. 766.

LÛTCHÛ (*Tanaka* s. n. jap. Moran), sec. *Maximowicz.*

NOM. LUTCH.: Mōran, ex *Tashiro* in litt.

DISTRIB. Formosa (*Makino*!), China, the Malay Peninsula and Archipelago, and India.

OLACINEÆ.

Schœpfia Schreb.

S. jasminodora, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 3 (1846) p. 135; Blume, Mus. Bot. Lugd.-Bat. I, p. 175; Walp. Ann. I, p. 960; Miq. Prol. Fl. Jap. p. 371; Franch. et Sav. Enum. Pl. Jap. I, p. 76; Forbes et Hemsl. Ind. Fl. Sin. I, p. 114.

Schœpfioides jasminodora, Miers, in Journ. Linn. Soc. XVII (1878) p. 77.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*).

DISTRIB. Japan.

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ILICINEÆ.

Ilex, L.

I. Hanceana, Maxim. De Coriaria, Ilice, etc. in Mém. Acad. Sc. Pétersb., 7 sér. XXIX (1881) p. 33; Forbes et Hemsl. Ind. Fl. Sin. I, p. 116.

I. buxifolia, Hance, in Journ. Bot. 1876, p. 364.

Insula Utchinâ (*Tashiro*! Febr. 1887, steril.): tractu Kundjan (*Matsumura*! Majo 1897, fl., sub flor. alba).

Distrib. South China.

I. crenata, Thunb. Fl. Jap. p. 78; DC. Prodr. II, p. 16; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 147; Miq. Prol. Fl. Jap. p. 268; Franch. et Sav. Enum. Pl. Jap. I, p. 76; Fr. Schmidt, Reisen in Amurl. p. 122; Maxim. De Coriaria, Ilice, etc. in Mém. Acad. Sc. Pétersb., 7 sér. XXIX (1881) p. 33.

? *I. Thomsoni,* Hook. f. Fl. Brit. Ind. I, p. 602, sec. Maximowicz.

Insula Utchinâ: in tractu Kundjan (*Tashiro*! Majo 1887, frf., *Matsumura*! Majo 1897, frf.); inter Tchatan et Unna (*T. Itō,* n. 980, 22 Aug. 1894); inter Nagu et Unna (*S. Tanaka*! n. 79, 16 Majo 1891, *T. Itō,* n. 1058, 25 Aug. 1894, fructibus quasi fasciculatis); in monte Unna-daki (*T. Itō,* n. 1059, 23 Aug. 1894).

Archipelago Yêma: insula Irumuti ad pagum Sunaimura (*T. Itō,* n. 328, 15 et 19 Julio 1891, frf.).

Nom. Lutch.: Muttchâ-gara (U.) ex *Matsumura* in litt.

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DISTRIB. Sachalin, Japan. The Indian plant (*I. Thomsoni*, Hook. f.) may, according to Maximowicz, perhaps be referred to this species.

I. rotunda, Thunb. Fl. Jap. p. 77 ; DC. Prodr. II, p. 16 ; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 149 ; Miq. Prol. Fl. Jap. p. 269 ; Franch. et Sav. Enum. Pl. Jap. I, p. 77 ; Maxim. De Coriaria, Ilice, etc. in Mém. Acad. Sc. Pétersb., 7 sér. XXIX (1881) p. 36 ; Hance, in Journ. Bot. 1883, p. 296 ; Forbes et Hemsl. Ind. Fl. Sin. I, p. 118; Shitsumon Honzō, Gwaihen, IV, t. 11.

I. lævigata, Blume MSS. in distrib. Pl. Oldh. sec. Forbes et Hemsl. l.c.

I. microcarpa, Lindl. et Paxt. in "Paxt. Fl. Gard. I, p. 43, f. 28."

I. spec. incerta, Miq. Cat. Herb. Jap. p. 19.

LÛTCHÛ (*Wright*, sec. *Forbes* et *Hemsl*).

ARCHIPELAGO YÊMA (*Tashiro* ! Julio 1887, frf.).

DISTRIB. Japan and China.

I. integra, Thunb. Fl. Jap. p. 77 ; DC. Prodr. II, p. 16 ; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 148 ; Miq. Prol. Fl. Jap. p. 269 ; Franch. et Sav. Enum. Pl. Jap. I, p. 77 ; Maxim. De Ilice, Coriaria, etc. in Mém. Acad. Sc. Pétersb., 7 sér. XXIX (1881) p. 41 ; Forbes et Hemsl. Ind. Fl. Sin. I, p. 116 ; Shitsumon Honzō, Gwaihen, IV, t. 16.

Prinos integra, Hook. et Arn. Bot. Beech. Voy. p. 261.

LÛTCHÛ (*Wright*, sec. *Forbes* et *Hemsl.*).

INSULA UTCHINÂ : tractu Kundjan (*Matsumura* ! Majo 1887, fl.).

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ARCHIPELAGO YÊMA in montanis (*Tashiro*! Julio 1887, frf.).

DISTRIB. Japan, the Bonin Islands, Corea and China.

I. Mertensii, Maxim. De Coriaria, Ilice, etc. in Mém. Acad. Sc. Petersb., 7 sér. XXIX (1881) p. 36, et in Engler, Bot. Jahrb. VI (1885) p. 60; Forbes et Hemsl. Ind. Fl. Sin. I, p. 117.

INSULA AMAMI-ŌSHIMA (*Doederlein* sec. *Maximowicz*).

INSULA UTCHINÂ: in Kushi-madjiri (*Tashiro*! Febr. 1887, steril.).

DISTRIB. Bonin Islands.

Tashiro's specimens, though sterile, seem to agree exactly with this species.

I. cinerea, Champ. in "Hook. Kew Journ. Bot. IV, p. 327"; Walp. Ann. IV. p. 430; Benth. Fl. Hongk. p. 64; Maxim. De Coriaria, Ilice, etc. in Mém. Acad. Sc. Pétersb., 7 sér. XXIX (1881) p. 46; Forbes et Hemsl. Ind. Fl. Sin. I, p. 115.

INSULA UTCHINÂ: tractu Kundjan (*Matsumura*! Majo 1897, frf.); circa montem Nagu-daki (*S. Tanaka*! n. 189, 20 Majo 1891, steril.).

NOM. LUTCH.: Muttchagii (U.) ex *Matsumura* in litt.

DISTRIB. Hongkong.

Bird-lime is said to be manufactured from the bark of this species in the Luchuan Islands.

I. sp.

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, steril.).

Allied to the above species, but the leaves are smaller,

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the margin with deeper serrature, and the base being acute and not rotundate.

I. sp.

INSULA UTCHINÂ: Kundjan-madjiri in montanis (*Tashiro*! Martio 1887, steril.).

CELASTRINEÆ.

Euonymus, L.

E. japonicus, Thunb. Fl. Jap. p. 100; Blume, Bijdr. p. 1147; DC. Prodr. II, p. 4; Sieb. Syn. Pl. Œcon. n. 269; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 51; Hook. et Arn. Bot. Beech. Voy. p. 261, t. 54; Miq. Prol. Fl. Jap. p. 17; Regel, in Ind. Sem. Hort. Petrop. 1866, p. 102; Franch. et Sav. Enum. Pl. Jap. I, p. 79; Maxim. in Mél. Biol. XI (1881) p. 178; Forbes et Hemsl. Ind. Fl. Sin. I, p. 120.

LÛTCHÛ (*Wright, Beechey* sec. *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA: inter Nazé et Yamatohama (*T. Itō*, n. 554, 16 Julio 1894, fructif.).

INSULA UTCHINÂ (*Tashiro*! Aug. 1887, frf., *Matsumura*! 1897, fl.).

INSULA MYÂKU: circa Gushiku (*Tatitu*! n. 1232, 25 Majo 1895, steril., *T. Itō*, n. 1156, 17 Aug. 1894, fructif.).

ARCHIPELAGO YÊMA: insula Irumuti ad pagum Fushitati-mura (*T. Itō*, n. 1416, 13 Aug. 1894, fructif.).

NOM. LUTCH.: Ivsana-bigii (M.) ex *Tatitu* in litt.

DISTRIB. Bonin Islands! Japan and China.

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E. Tanakæ, Maxim. in Mél. Biol. XII (1886) p. 428. 91

LÛTCHÛ (*H. Nakagawa*! steril.).

INSULA AMAMI-ŌSHIMA (*S. Tanaka*! n. 455, 26 Aug. 1891, frf.).

INSULA UTCHINÂ: ad oppidum Shui (*T. Itō*, n. 789, 26 Julio 1894, frf., *Matsumura*! 1897, fl.); tractu Kundjan in Kushi-madjiri ad Ufura (*S. Tanaka*! n. 211, 22 Majo 1891, flor.); ad portum Nâfa in Idzunzatchi-mura (*Yamada*! 1882, juvenil. sine fl. et frf.).

ARCHIPELAGO YÊMA: insula Irumuti ad pagum Sunai-mura (*S. Tanaka*! n. 331, 15 et 19 Junio 1891, frf.), ad pagum Fushitati-mura (*T. Itō*, n. 1415, 13 Aug. 1894, frf.).

NOMIN. LUTCH.: Kuiki (U.) ex *Yamada* in litt.; Futuma (U.) ex *Matsumura* in litt.; Pashikii (Y.) ex *T. Itō*.

DISTRIB. Japan.

Yamada's specimen, having narrower and more minutely serrated leaves, seemed, at first sight, to be different from *E. Tanakæ*, but after comparing with fresh material, I was assured that it is only a young branch of that species. [T. Itō].

E. Tashiroi, Maxim. in Mél. Biol. XII (1886) p. 430; Forbes et Hemsl. Ind. Fl. Sin. I, p. 121.

LÛTCHÛ (*Tashiro*! 1882, fl., sec. *Maximowicz.*, *K. Nakazawa*! 1894, fructif. in Herb. Normal School, Kagoshima).

INSULA UTCHINÂ (*Matsumura*! 1897, steril.): tractu Kundjan ad Finidji-madjiri (*Tashiro*! Febr. 1887, steril.); circa montem Nagu-daki (*S. Tanaka*! n. 163, 20 Majo 1895, steril., *T. Itō*, n. 1112, 24 Aug. 1894, fructif.).

NOM. LUTCH.: Marasukuiku (U.) ex *Matsumura* in litt.

E. echinatus, Wall. in "Roxb. Fl. Ind. ed. Carey, II,

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p. 410"; "Royle, Illustr. t. 31"; Lawson, in Hook. f. Fl. Brit. Ind. I, p. 610; Forbes et Hemsl. Ind. Fl. Sin. I, p. 610.

E. scandens, Graham, in Edinb. N. Phil. Journ. (1827) p. 386.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*).

INSULA UTCHINÂ: ad Kundjan-madjiri in montosis (*Tashiro*! Febr. 1887, steril. sub nom. "Euonymus japonicus, Th. var. radicans, Miq?").

DISTRIB. China and the Himalayas.

E. lutchuensis, T. Itō.

Arbuscula tota glabra, ramulis gracilibus subquadrangulatis. Folia chartacea, breviter petiolata, lanceolata vel elliptico-lanceolata, crenato-serrata, utrinque viridia vel glaucescenti-viridia, venis primarius utrinque prominentibus, venulis sæpe obscuris. Cymæ subterminales rarius axillares, 2-3-floræ, pedunculis elongatis filiformibus folio brevioribus, pedicellis erectis ad apicem crassis. Bracteæ sub articulatione pedicellorum insertæ minutæ subulatæ fugaces. Flores tetrameri, mediocria, viridio-rufescentes, laciniæ calycis depresse semi-orbiculatæ minutissime erosæ; petala sessilia calyce duplo longiora patentia orbicularia; stamina et stylus e disco vix emersa. Capsula lævis subcornuta 4-partita, quorum 1-2 vel 3 partes rudimentalia et diminuta; valvæ dehissæ ovatæ; arillus ochracea totum semen obtegens. Semen oblongo-ellipsoidea, testa tenui lævi.

INSULA UTCHINÂ (*Matsumura*! 1897, flor.).

ARCHIPELAGO YÊMA: in montosis (*Tashiro*! Julio 1887, flor. juvenil.): insula Ishigatchi (*T. Itō*, n. 1274, 11 Julio 1894, fructif.), ad montem Suri (*Aragatchi*! n. 1346, 21

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Martio 1895, flor.); insula Irumuti ad pagum Sunai-mura (*S. Tanaka*! n. 332, 15 et 19 Junio 1891, steril.).

NOMIN. LUTCH.: Pashin-gara-kii (Y.) ex *Aragatchi*; Gihagi (Y.) ex *S. Tanaka* in schedula.

Folia 3-7 cm. longa, ¾-3 cm. lata, petiolo 2-5 mm. longo. Pedunculi 1½-3 cm. longi, pedicellis 4-5 mm. longis. Flores diametro 4-5 mm. Calyx diam. 3½ mm. Petala 2 mm. Corna capsulæ atropurpurea, 5-7 mm. longa, 3-5 mm. lata.

Allied to *E. gracillimus*, Hemsl., but can be distinguished from that species by its habits being not procumbent, and also by the 4-merous flowers; from *E. Przewalskii*, Maxim. by the larger, chartaceous leaves, by the peduncles being shorter than the leaves, and by the form of the capsules; from *E. cornuta*, Hemsl. by the broader leaves, glabrous petals, and by the smaller capsules; and from *E. alata*, Thunb. by the branches being more slender and flexible and never winged, and also by the capsules.

DISTRIB. Endemic.

Celastrus, L.

C. articulatus, Thunb. Fl. Jap. p. 97; DC. Prodr. II, p. 7; Bunge, Enum. Pl. Chin. Bor. p. 14; Miq. Prol. Fl. Jap. p. 17; Franch. et Sav. Enum. Pl. Jap. I, p. 80; Maxim. in Mél. Biol. XI (1881) p. 200; Franch. Pl. David. I, p. 70; Forbes et Hemsl. Ind. Fl. Sin. I, 122; Fr. Schmidt, Reisen im Amurl. p. 122; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 149; A. Gray. Bot. Jap. p. 384.

C. orbiculatus, Lamk. Encycl. II, p. 94.

C. punctatus, Thunb. Fl. Jap. p. 97.

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C. Tatarinowii, Rupr. in "Bull. Phys.-Math. Acad. Pétersb. XV (1857) p. 357."

C. n. sp., Maxim. Ind. Fl. Pekin. in Primit. Fl. Amur. p. 740.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*).

DISTRIB. Japan, Sachalin, Corea and China.

C. diversifolius, Hemsl. in Forbes et Hemsl. Ind. Fl. Sin. I, p. 123; Henry, List Pl. Formos. p. 27.

Gymnosporia diversifolia, Maxim. in Mél. Biol. XI (1881) p. 204.

Catha diversifolia, A. Gray, ex Maxim. in Mél. Biol. XI (1881) p. 204.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*): insula U-sima [Amami-Ōshima?] (*Small* sec. *Maximowicz*).

INSULA UTCHINÂ in litorale (*Tashiro*! Aug. 1887, fl. immat. et frf., *Matsumura*, April. 1897, steril.): ad portum Nâfa (*T. Itō*, n. 846, 27 Julio 1894); ad Ōnuyama (*T. Itō*, n. 847, 30 Julio 1897, flor. et fructif.); inter Tchatan et Unna (*T. Itō*, n. 982, Aug. 22 1894, flor.); Kushimadjiri ad Ufura (*S. Tanaka*! n. 210, 22 Majo 1891, steril.).

INSULA MYÂKU (*T. Itō*, 1157, 9 Aug. 1894, flor. et fructif.): ad Gushiku (*Tatitu*! n. 1233, 25 Majo 1895, steril.); insula Irabu (*T. Itō*, n. 210, 17 Aug. 1894, fl.).

NOMIN. LUTCH.: Putorki seu Tarekasgii (M.) ex *Tatitu*.

DISTRIB. China and Hainan.

Elæodendron, Jacq. f.

E. japonicum, Franch. et Sav. Enum. Pl. Jap. II, p. 315; Maxim. in Mél. Biol. XI (1881) p. 205.

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Cassine japonica, O. Kuntze; Lösener, in Engler et Prantl, Natürl. Pflanzenfam. III, 5, p. 215; Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) p. 62.

INSULA UTCHINÂ (*Matsumura*! 1897, steril.): tractu Kundjan (*Tashiro*! April. 1887, flor. et frf.).

ARCHIPELAGO YÊMA: insula Utchibanari (*T. Itō*, n. 1496, 12 Aug. 1894, steril.).

Tashiro's specimen is very interesting as it bears an immature fruit, which is glabrous, ovate-oblong, 1 inch long, ½ inch wide, longitudinally striate, mucronate at the apex, with persistent calyx.

DISTRIB. Japan.

RHAMNACEÆ.

Rhamnella, Miq.

R. franguloides, Weberbauer, in Engler et Prantl, Natürl. Pflanzenfam. III, 5, p. 406 (1895); Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) p. 22.

R. japonica, Miq. Prol. Fl. Jap. p. 218 (1867); Franch. et Sav. Enum. Pl. Jap. I, p. 81.

Microrhamnus franguloides, Maxim. Rhamn. Or.-As. in Mém. Acad. Sc. Pétersb. 7 sér. X (1866) p. 4, t. 1, figg. 15-23, et in Mél. Biol. XII (1886) p. 431; Forbes et Hemsl. Ind. Fl. Sin. I, p. 127.

Berchemia congesta, S. Moore, in Journ. Bot. 1875, p. 226.

INSULA AMAMI-ŌSHIMA: in montanis (*Tashiro*! Sept. 1887, frf.).

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ARCHIPELAGO YÊMA : insula Ishigatchi ad Nuzuku-kwidji (*S. Tanaka*! n. 274, 2 Julio 1891, fruct. immat.).

NOM. LUTCH.: Ashangi (O.) ex *Tashiro* in litt.

DISTRIB. Japan and China.

Berchemia, Neck.

B. lineata, DC. Prodr. II, p. 23; Hook. et Arn. Bot. Beech. Voy. pp. 177 et 261, t. 37 ; Benth. Fl. Hongk. p. 67 ; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 147 ; Maxim. Rhamn. Or.-As. in Mém. Acad. Sc. Pétersb. 7 sér. X (1866) p. 6, et Act. Hort. Petrop. XI, p. 99 ; Forbes et Hemsl. Ind. Fl. Sin. I, p. 127 ; Laws. in Hook. f. Fl. Brit. Ind. I, p. 638 ; Makino, in Bot. Mag. Tōkyō, X (1896) p. 65 ; Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) 22.

Rhamnus lineatus, L. " Cent. Pl. II, p. 11," et Amœn Acad. IV, p. 308 ; " Osbeck, Voy., Eng. ed. I, p. 353, t. 7."

LÛTCHÛ (*Wright* sec. *Maximowicz*, nec non *Forbes* et *Hemsl.*).

INSULA KAKIROMA adjectæ insulæ Amami-Ōshima (*Tashiro*! Sept. 1887, fl. immat.).

INSULA UTCHINÂ in litorale (*Tashiro*! Junio 1887, flor. juven.) : in portu Nâfa (*T. Itō*, n. 903, 28 Julio 1894, fructif.), ad pagum Idzunzatchi-mura (*Yamada*! 22 Aug. 1882, steril.) ; ad oppidum Shui (*Kuroiwa* ex *Makino*) ; prope Unna (*Matsumura*! 25 April. 1897, steril.) ; circa Tumigushiku (*S. Tanaka*! n. 8, 13 Majo 1891, steril.).

DISTRIB. Formosa (*Makino*!), Hongkong, China and the Himalayas.

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Rhamnus, L.

R. virgata, Roxb. **var. sylvestris,** Maxim. Rhamn. Or.-As. in Mém. Akad. Sc. Pétersb. 7 sér. X (1866) p. 13, et in Act. Hort. Petrop. XI, p. 100; Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) p. 22.

R. sp., Forbes et Hemsl. Ind. Fl. Sin. I, p. 130.

LŪTCHŪ (*Wright*, fruct. immat. sec. *Maximowicz*).

INSULA UTCHINÂ (*Matsumura*! Majo 1897, fruct. immat.): circa Tumi-gushiku, cult. (*T. Itō*, n. 904, 25 Julio 1894, frf.).

The forms of the leaves in Matsumura's specimens are elliptical or lanceolate-elliptical, with long acuminate mucronate apex, while in Itō's specimens they are oval or obovate-oval, with obtusely cuspidate or acuminate apex. As our materials are not sufficient to determine the limitation of species in this difficult genus, we have simply followed Maximowicz. Lawson (in Hook. f. Fl. Brit. Ind. I, p. 639) unites many forms under the name *R. dahurica*, while Forbes et Hemsley left Wright's specimens from the Luchuan Islands undermined. Further investigation is necessary to define the limits of the Eastern Asiatic species of this genus.

Sageretia, Brongn.

S. theezans, Brongn. in "Ann. Sc. Nat. 1 sér. X (1827) p. 36"; DC. Prodr. II, p. 27; Benth. Fl. Hongk. p. 68; Maxim. in Rhamn. Or.-As. in Mém. Acad. Sc. Pétersb. 7 sér. X (1866) p. 13, et in Act. Hort. Petrop. XI, p. 100; Laws. in Hook.

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f. Fl. Brit. Ind. I, p. 641; Forbes et Hemsl. Ind. Fl. Sin. I, p. 131; Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) p. 12; Henry, List Pl. Formos. p. 27.

R. theezans, L. Mant. II, p. 207.

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, steril.).

INSULA MYÂKU: inter Firara et Nagama (*S. Tanaka*! n. 249, 5 Junio 1891, steril.).

NOM. LUTCH.: Kuroigé (O.) ex *Tashiro* in litt.

DISTRIB. Formosa (*Kawakami*! *Ōwatari*!), the Philippines, Hongkong, China, India and Beluchistan.

Colubrina, Rich.

C. asiatica, Brong. in "Ann. Sc. Nat. 1 sér. X (1827) p. 369"; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 166; "Wight, Illustr. t. 74"; Benth. Fl. Austral. I, p. 413; Grisebach, Fl. W. Ind. Isl. p. 100; Oliv. Fl. Trop. Afr. I, p. 383; Lawson, in Hook. f. Fl. Brit. Ind. I, p. 642; Hillebrand, Fl. Hawaii. Isl. p. 80; King, in Journ. As. Soc. Beng. LXV (1896) p. 377; Henry, List Pl. Formos. p. 27; Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) p. 23.

C. javanica, Miq. Fl. Ind. Bat. I, p. 649.

Ceanothus asiaticus, Lamk. Illustr. t. 129, f. 2; DC. Prodr. II, p. 30; Roxb. Fl. Ind. I, p. 615.

C. capsularis, Forst. "Prodr. p. 18;" DC. Prodr. II, p. 32.

Pomaderris capsularis, G. Don, Gen. Syst. II, p. 39.

Rhamnus acuminata, Colebr. in Roxb. Fl. Ind. I, p. 615.

INSULA MYÂKU: in litorale (*Tashiro*! Julio 1887, frf.).

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ARCHIPELAGO YÊMA: ad insulam Irumuti in maritimis (*Tashiro*! Aug. 1887, frf.).

DISTRIB. India, the Malay Islands, S. Africa, Australia and Polynesia.

AMPELIDEÆ.

Vitis, L.

V. Labrusca, L. Sp. Pl. ed. 1, p. 134; Willd. Sp. Pl. I, p. 1181; DC. Prodr. I, p. 634; Torrey et Gray, Fl. N. Am. I, p. 244; A. Gray, Man. Bot. N. Un. St. p. 112; Chapm. Fl. S. Un. St. p. 71.

Var. Thunbergii, Franch. et Sav. Enum. Pl. Jap. I, p. 134, in adnot.

V. Thunbergii, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 198; Planch. in DC. Monogr. Phanerog. V, p. 333.

V. Labrusca, Thunb. Fl. Jap. p. 103; Franch et Sav. Enum. Pl. Jap. I, p. 134; Engler, in Bot. Jahrb. VI (1885) p. 60.

V. Labrusca varr. ficifolia et *sinuata,* Regel, Consp. Gen. Vitis (1873), p. 396.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA: inter Yamatohama et Taken (*T. Itō,* n. 606, 17 Julio 1894, fl.).

INSULA UTCHINÂ: ad portum Nâfa in Idzunzatchimura (*Yamada*! 1882, steril.).

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ARCHIPELAGO YÊMA : insula Kuru-shima (ex *Tashiro*).
DISTRIB. Japan, Formosa and China.

V. lanata, Roxb. "Hort. Beng. p. 18," et Fl. Ind. I, 660; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 650, pro parte; Benth. Fl. Hongk. p. 53; Lawson, in Hook. f. Fl. Brit. Ind. I, p. 651, pro parte; Forbes et Hemsl. Ind. Fl. Sin. I, p. 134; Planch. in DC. Monogr. Phanerog. V, p. 328; Henry, List Pl. Formos. p. 28; King, in Journ. As. Soc. Beng. LXV (1896) p. 111.

V. cordifolia, Roth, "Nov. Sp. p. 158" (non Michx.).

V. Heyneana, Rœm. et Schult. Syst. V, p. 318; DC. Prodr. I, p. 634.

V. indica, Hook. et Arn. Bot. Beech. Voy. p. 260 (non L.), sec. Forbes et Hemsl.

V. Labrusca var. lanata, Regel, Consp. Gen. Vitis (1873), p. 397.

LÛTCHÛ (*Beechey* sec. *Forbes* et *Hemsl.*).

INSULA UTCHINÂ (*Tashiro*! Martio 1887, fl.) : ad portum Nâfa in Idzunzatchi-mura (*Yamada*! 1882, steril.).

ARCHIPELAGO YÊMA : insula Ishigatchi ad pagum Shika-mura (*Kuroiwa* sec. *Makino*).

DISTRIB. Formosa, Hongkong and India.

* **V. vinifera,** L. Sp. Pl. ed. 1, p. 202; Thunb. Fl. Jap. p. 103; Lour. Fl. Cochinch. p. 155; DC. Prodr. I, p. 633; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 130; Miq. in Mus. Bot. Lugd. Bat. I, p. 92, et Prol. Fl. Jap. p. 89; Franch. et Sav. Enum. Pl. Jap. I, p. 83; Brandis, For. Fl. Ind. p. 98; Lawson, in Hook. f. Fl. Brit. Ind. I, p. 652; Forbes et Hemsl. Ind. Fl. Sin. I, p. 136.

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LÛTCHÛ, cult. ex *Tashiro* in litt.

DISTRIB. Mediterranean region, Asia Minor, China, the Himalayas, India and Ceylon; only cultivated in Japan.

V. heterophylla, Thunb. Fl. Jap. p. 103; DC. Prodr. I, p. 634; Benth. Fl. Hongk. p. 53; Miq. Ann. Mus. Lugd.-Bat. I, p. 92, et Prol. Fl. Jap. p. 89; Franch. et Sav. Enum Pl. Jap. I, p. 84; Engler, in Bot. Jahrb. VI (1885) p. 60; Forbes et Hemsl. Ind. Fl. Sin. I, p. 133; Maxim. Enum. Pl. Mong. p. 137; Henry, List Pl. Formos. p. 28.

Ampelopsis heterophylla, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 1 (1846) p. 197; Planch. in DC. Mongr. Phanerog. V, p. 455.

A. humilifolia, Bunge, Enum. Pl. Chin. Bor. p. 12; Maxim. Ind. Fl. Mong. in Primit. Fl. Amur. p. 480.

Cissus brevipedunculata, Maxim. Primit. Fl. Amur. p. 68.

C. bryonifolia, Regel, Tent. Fl. Ussur. t. 3, f. 3 (non Bunge).

Vitis heterophylla varietates, Regel, Consp. Gen. Vitis (1873), p. 392 (excl. pl. Bor. Am.).

INSULA AMAMI-ŌSHIMA: inter Nishinakama et Nazé (*T. Itō,* n. 719, 20 Julio 1894, frf.).

INSULA UTCHINÂ (*Tashiro*! Junio 1887, fl. et frf.).

INSULA MYÂKU (*T. Itō,* n. 1158, 9. Aug. 1894, fl. et frf.); insula Irabu (*T. Itō,* n. 1211, 17 Aug. 1894, fl.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro, T. Itō,* n. 1374, 8 Aug. 1894 fl.); insula Takidun (*T. Itō,* n. 1374, 15 Aug. 1894, fl.).

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Nom. Lutch.: Vōmuskii (M.) ex *T. Itō*.

Distrib. Japan, Formosa (*Makino*!), Hongkong, Corea, China and Mandshuria.

V. corniculata, Benth. Fl. Hongk. p. 54; Walp. Ann. VII, p. 611; Forbes et Hemsl. Ind. Fl. Sin. I, p. 132.

V. angustifolia, Benth. Fl. Hongk. p. 54 (vix Wall.).

Cissus corniculata, Planch. in DC. Monogr. Phanerog. V, pt. 2, p. 563.

Insula Amami-Ōshima, in montanis (*Tashiro*! Sept. 1887, steril.): inter Nishinakama et Nazé (*T. Itō*, n. 720, 20 Julio 1894, steril.).

Distrib. Hongkong and China.

Leaves pedate; leaflets lanceolate or ovate-lanceolate, acuminate, coarsely mucronate-serrate.

V. formosana, Hemsl. in Annals Bot. IV (1895) p. 151; Henry, List Pl. Formos. p. 28.

? *V. carnosa*, Hook. et Arn. Bot. Beech. Voy. p. 260.

Insula Utchinâ : Kundjan-madjiri in montanis (*Tashiro*! Febr. 1887, steril.); inter Tchatan et Unna (*T. Itō*, n. 983, 22 Aug. 1894); in monte Nagu-daki (*S. Tanaka*, n. 164, 20 Majo 1891).

Distrib. Formosa.

SAPINDACEÆ.

Cardiospermum, L.

C. Halicacabum, L. Sp. Pl. ed. 1, p. 366; Roxb. Fl. Ind. II, p. 292; Griff. Notul. IV, p. 546, et Ic. Pl. Asiat. IV,

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t. 599, f. 3; Bot. Mag. t. 1049; DC. Prodr. I, p. 601; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 109; Wight, Ic. Pl. Ind. Or. t. 508; Benth. Fl. Hongk. p. 46, et Fl. Austral. I, p. 453; Baker, in Oliv. Fl. Trop. Afr. I, p. 237; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 670; Forbes et Hemsl. Ind. Fl. Sin. I, p. 138; Hillebrand, Fl. Hawaii. Isl. p. 85; Henry, List. Pl. Formos. p. 28.

C. Halicacabum var. microcarpum, Benth. Fl. Hongk. p. 46, in adnot.

C. microcarpum, H. B. K. "Gen. et Sp. Pl. V, p. 104"; DC. Prodr. I, p. 601; Hance, in Journ. Linn. Soc. XIII (1872) p. 101, et in Journ. Bot. 1878, p. 226.

Insula Amami-Ōshima (*Tashiro*! Sept. 1887, fl. et frf.): inter Nazé et Yamatohama (*T. Itō*, n. 556, 16 Julio 1894, fl. et frf.).

Insula Utchinâ (*Tashiro*! Junio 1887, fl. et frf.).

Insula Myâku (*T. Itō*, n. 1159, 7 Aug. 1894, fl. et fructif.); circa Gushiku (*Tatitu*! n. 1234, 25 Majo 1895, fl. et frf.).

Archipelago Yêma (*Tashiro*! Aug. 1887, fl. et frf.): insula Ishigatchi ad pagum Shika-mura (*Kuroiwa* ex *Makino*); insula Kuru-shima (ex *Tashiro*).

Nom. Lutch.: Yama-kusa (M.) ex *Tatitu* in litt.

Distrib. Common in the warm regions of Asia, including Formosa (*Makino*!), Hongkong, Hainan and China; also Africa, America and Australia.

The Luchuan specimens belong to *C. microcarpum*, H. B. K., which, according to King, should be united with *C. Halicacabum*, L., by innumerable gradations, and does not deserve "even varietal rank."

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Sapindus, L.

* **S. Mukorossi,** Gærtn. "Fruct. I, p. 342, t. 70"; DC. Prodr. I, p. 608; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 152; Miq. Prol. Fl. Jap. p. 256; Franch. et Sav. Enum. Pl. Jap. p. 86; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 683; Forbes et Hemsl. Ind. Fl. Sin. I, p. 139.

S. abruptus, Lour. Fl. Cochinch. p. 238.

S. foliis alternis, Thunb. Fl. Jap. p. 356.

LÛTCHÛ, cult. ex *Tashiro* in litt.

DISTRIB. Japan, the Bonin Islands and China; cultivated in India.

Euphoria, Commers. ed. Juss.

* **E. Longana,** Lam. Encycl. III, p. 574; DC. Prodr. I, p. 611; Radlk. in Engl. et Prantl, Natürl. Pflanzenfam. III, pt. 5, p. 329; Shitsumon Honzō, Suppl. t. 2.

Dimocarpus Longan, Lour. Fl. Cochinch. p. 233; "Trans. Hort. Soc. II, t. 28."

Nephelium benghalense, G. Don, Syst. I, p. 570.

N. Longana, Camb. in "Mém. Mus. Par. XVIII, p. 30"; Bot. Mag. t. 4096; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 113; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 688; Forbes et Hemsl. Ind. Fl. Sin. I, p. 139; Henry, List Pl. Formos. p. 29.

Sapindus benghalensis, Roxb. ex Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 113.

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Scytalia benghalensis, Roxb. ex G. Don, Gen. Syst. I, p. 570.

S. Longan, Roxb. "Hort. Beng. p. 29," et Fl. Ind. II. p. 270.

INSULA AMAMI-ŌSHIMA, cult. (*T. Itō*, n. 498, 21 Julio 1894).

INSULA UTCHINÂ, cult. ex *T. Itō*: ad oppidum Shui, cult. (*Matsumura*! 1897, steril.).

NOM. LUTCH.: Lin-gan (U.) ex *T. Itō*.

DISTRIB. China and Formosa; commonly cultivated in Formosa, Hongkong, China, Malaya and India.

Litchi, Sonner.

* **L. chinensis**, Sonner. "Voy. Ind. et Chin. III, p. 255, t. 129 (1782)"; Radlk. in Engler et Prantl, Natürl. Pflanzenfam. III. pt. 5, p. 330; Shitsumon Honzō, Suppl. t. 1.

Dimocarpus Lichi, Lour. Fl. Cochinch. p. 233.

Euphoria Lit-chi, Juss. Gen. p. 248.

E. punicea, Lam. Encycl. III, p. 573, et Illustr. t. 306.

Nephelium Lit-chi, Camb. in "Mém. Mus. Par. XVIII, p. 30"; Wight, Ic. Pl. Ind. Or. t. 43; Benth. Fl. Hongk. p. 47; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 687; Forbes et Hemsl. Ind. Fl. Sin. I, p. 139; Henry, List Pl. Formos. p. 29.

N. Dimocarpus, Hook. f. et Thoms. ex Hiern, in Hook. f. Fl. Brit. Ind. I, p. 688.

Sapindus edulis, Ait. Hort. Kew. II, p. 36 (1789), non Blume.

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Scytalia chinensis, Gærtn. "Fruct. I, p. 197, t. 42, f. 3."

S. Litchi, Roxb. "Hort. Beng. p. 28," et Fl. Ind. II, p. 269.

INSULA AMAMI-ŌSHIMA, cult. ex *Tashiro* in litt.

INSULA UTCHINÂ, cult.

NOM. LUTCH.: Liitchi ex *Tashiro* in litt.

DISTRIB. Commonly cultivated in Formosa, China, Malaya and India; probably not truly wild in China (according to Forbes and Hemsley).

Acer, L.

* **A. palmatum,** Thunb. Fl. Jap. p. 162; C. Koch, in Ann. Mus. Bot. Lugd. Bat. I, p. 251; A. Gray, in Perry Exped. p. 310; Miq. Prol. Fl. Jap. p. 20; Franch. et Sav. Enum. Pl. Jap. I, p. 88; Maxim. in Mél. Biol. X (1880) p. 607; Nichols. in Gard. Chron. n. s. XVI, p. 136; Pax, in Engler, Bot. Jahrb. VII, p. 20; Forbes et Hemsl. Ind. Fl. Sin. I, p. 141; Shitsumon Honzō, Gwaihen, IV, t. 18.

A. dissectum, Thunb. Fl. Jap. p. 160.

A. polymorphum, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 158, et Fl. Jap. II, t. 145.

A. septemlobum, Thunb. Fl. Jap. p. 162.

A. sessilifolium, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 158, et Fl. Jap. II, t. 146.

LŪTCHŪ, cult. ex Shitsumon Honzō, l.c. et *Tashiro* in litt.

DISTRIB. Japan; cultivated in China.

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A. oblongum, Wall. in DC. Prodr. I, p. 593; Benth. Fl. Hongk. p. 47; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 693; Maxim. in Mél. Biol. X (1880) p. 599; Pax, in Engler, Bot. Jahrb. VII (1886) p. 208; Forbes et Hemsl. Ind. Fl. Sin. I, p. 141; Henry, List Pl. Formos. p. 29.

Var. microcarpum, Hiern, in Hook. f. Fl. Brit. Ind. I, p. 693; Pax, in Engler, Bot. Jahrb. VII (1886) p. 208.

LÛTCHÛ (*Wright* fide *Benth.* et auctt., *H. Nakagawa*! n. 55, fructif., *K. Hirasawa*! frf. in herb. Normal School, Kagoshima, *Matsumura*! 1897, steril.).

INSULA UTCHINÂ: inter Nâfa et Tchatan (*T. Itō*, n. 955, 21 Aug. 1894); in Kundjan-madjiri circa Ufura (*S. Tanaka*! n. 212, 21 Majo 1891, frf.).

DISTRIB. Formosa, Hongkong, China and India.

A. rufinerve, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 155, et Fl. Jap. II, p. 85, t. 148; Miq. Prol. Fl. Jap. p. 20; Franch. et Sav. Enum. Pl. Jap. I, p. 89; Maxim. in Mél. Biol. X (1880) p. 596; Engler, Bot. Jahrb. VI (1885) p. 59; Pax, in Engler, Bot. Jahrb. VII (1886) p. 247; Forbes et Hemsl. Ind. Fl. Sin. I, p. 141.

LÛTCHÛ: insula Amami-ŌSHIMA (*Dœderlein* sec. *Engler* et auctt. plurr.).

DISTRIB. Japan.

Although we did not examine Döderlein's specimen, we question whether it may not be identical with the next species.

A. caudatum, Wall. "Pl. As. Rar. II, 4, p. 28, t. 132"; Walp. Repert. I, p. 409; Hiern, in Hook. f. Fl. Brit. Ind. I, p.

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695; Pax, in Engler, Bot. Jahrb. VII (1886) p. 197; Matsumura, in Bot. Mag. Tōkyō, XII (1898) p. 63.

A. acuminatum, Wall. ex D. Don, Prodr. Fl. Nep. p. 249.

A. pectinatum, Wall. "Pl. As. Rar. II, 4, p. 28"; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 695; Pax, in Engler, Bot. Jahrb. VII (1886) p. 249.

INSULA AMAMI-ŌSHIMA, in montanis (*Tashiro*! Sept. 1887, frf.): ad Miyamantō inter Yamatohama et Taken (*T. Itō*, n. 606, 17 Julio 1894, frf.).

DISTRIB. India.

The Indian *A. caudatum*, Wall. is unknown to us, but the description given by Hiern (in Hook. f. Fl. Brit. Ind. I, p. 695) seems to agree with our plant, which, however, is also closely allied to *A. cratægifolium*, Sieb. et Zucc., and perhaps may prove to be only a variety of the latter species.

Dodonæa, L.

D. viscosa, Jacq. "Enum. Pl. p. 19"; L. Mant. Pl. Alt. p. 228; DC. Prodr. I, p. 616; Baker, in Oliv. Fl. Trop. Afr. I, p. 433; Benth. Fl. Austral. I, p. 475; Boiss. Fl. Orient. I, 953; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 697; Forbes et Hemsl. Ind. Fl. Sin. I, p. 142; Hillebrand, Fl. Hawaii. Isl. p. 87; King, in Journ. As. Soc. Beng. LXV (1896) p. 451; Henry, List Pl. Formos. p. 29.

D. angustifolia, L. f. Suppl. p. 218; Roxb. Fl. Ind. II, p. 256.

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D. arabica, Hochst. et Steud. in "Flora, XXIV (1841) I, Intell. p. 28."

D. Burmanniana, DC. Prodr. I, p. 616; "Wight, Illustr. I, t. 52"; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 114.

D. dioica, Roxb. "Hort. Beng. p. 28," et Fl. Ind. II, p. 256.

D. heterophylla, Hortul. ex G. Don, Gen. Syst. I, p. 674.

D. microcarpa, DC. Prodr. I, p. 617.

D. pallida, Miq. "Anal. Bot. Ind. III, p. 7."

D. pentandra, Griff. Notul. IV, p. 548.

D. spathulata, Sm. in "Rees, Cycl. XII, n. 2."

D. Wightiana, Blume, "Rumph. III, p. 189."

Ptelea viscosa, L. Sp. Pl. ed. 1, p. 118.

Insula Utchinâ (*Matsumura*! 1897, fl. et frf.): ad Kimmadjiri in maritimis (*Tashiro*! Majo 1887, frf.).

Archipelago Yêma: insula Irumuti ad pagum Kabiramura in maritimis (*Tashiro*! Aug. 1887, frf.); ad pagum Fushitati-mura in maritimis (*T. Itō*, n. 1417, 13 Aug. 1894, fl. et frf.); ad pagum Sunaye-mura (*S. Tanaka*! n. 331, 15 et 19 Junio 1891, frf.).

Nom. Lutch.: Nûkanikii (Y.) ex *T. Itō*.

Distrib. Generally spread in warm countries, including the Bonin Islands! Formosa (*Makino*!), China and India.

Euscaphis, Sieb. et Zucc.

E. japonica, Pax, in Engler et Prantl, Natürl. Pflanzen-

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fam. III, 5, p. 262, f. 144, A-E (1893); Matsumura, in Bot. Mag. Tōkyō, XII (1898) p. 63.

E. staphyleoides, Sieb. et Zucc. Fl. Jap. I, p. 124, t. 67 (1835); Miq. Prol. Fl. Jap. p. 256; Franch. et Sav. Enum. Pl. Jap. I, p. 91; Franch. Pl. David. I, p. 78; Forbes et Hemsl. Ind. Fl. Sin. I, p. 143; Hance, in Journ. Bot. 1880, p. 260, et 1881, p. 4.

Sambuscus japonica, Thunb. Fl. Jap. p. 125 (1784).

Triceros japonica, Baill. Nat. Hist. Pl. ed. Eng. V, p. 343, figg. 336, 337 et 338.

INSULA AMAMI-ŌSHIMA: inter Nazé et Yamatohama (*T. Itō* n. 557, 27 Julio 1894, frf.).

INSULA UTCHINÂ: in tractu Kundjan (*Tashiro*! Sept. 1887, frf.); ad Unna (*Matsumura*! 25 April. 1897, frf.).

NOM. LUTCH.: Miifantchâ (U.) sec. *Matsumura*.

DISTRIB. Japan and China.

Turpinia, Vent.

T. pomifera, DC. Prodr. II, p. 3; Hiern, in Hook. f. Fl. Brit. Ind. I, p. 698; Forbes et Hemsl. Ind. Fl. Sin. I, p. 143; Maxim. in Mél. Biol. XII (1886) p. 435; King, in Journ. As. Soc. Beng. LXV (1896) p. 452.

T. latifolia, Wall. "Cat. n. 4939."

T. martabanica, Wall. "Cat. n. 4278."

T. microcarpa, Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 156.

T. nepalensis, Wall. "Cat. n. 4277"; Wight et Arn.

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Prodr. Fl. Pen. Ind. Or. I, p. 156; Wight, Ic. Pl. Ind. Or. t. 972; Benth. Fl. Hongk. p. 48.

Canarium Sajiga, Hamilt. ex Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 175.

Dalrymplea pomifera, Roxb. "Hort. Beng. p. 17," "Corom. Pl. t. 299," et Fl. Ind. I, p. 633.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, fl.).

INSULA UTCHINÂ: in tractu Kundjan circa montem Nagu-daki (*S. Tanaka*! n. 165, 20 Majo 1891, steril.); ad oppidum Shui (*Matsumura*! 1887, flor. et fruct. immat.).

INSULA MYÂKU: inter Nagama et Arazatu (*S. Tanaka*! n. 250, 6 Junio 1891, frf.).

NOMIN. LUTCH.: Imokuso (O.) sec. *Tashiro* in schedula; Yama Kunenbu (U.) ex *T. Itō*.

DISTRIB. Very common in the tropical and subtropical parts of Asia, including Japan, Hongkong, South China and India.

SABIACEÆ.

Meliosma, Blume.

M. pungens, Walp. Repert. I, p. 423; Hook. f. Fl. Brit. Ind. II, p. 4.

M. acuminata, Hook. f. Fl. Brit. Ind. II, pp. 4 et 774.

M. ferruginea, Sieb. et Zucc. ex Hook. f. Fl. Brit. Ind. II, p. 4.

M. rigida, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1843) p. 153; Miq. Prol. Fl. Jap.

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p. 257; Franch. et Sav. Enum. Pl. Jap. I, p. 91; Maxim. in Engler, Bot. Jahrb. VI (1885) p. 60; Forbes et Hemsl. Ind. Fl. Sin. I, p. 145; Hance, List Pl. Forms. p. 29.

Millingtonia pungens, Wall. "Cat. n. 8114"; "Royle, Illustr. Bot. Himal. p. 139."

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA (*Doederlein* sec. *Maxim.*).

INSULA UTCHINÂ: (*Matsumura*! 1897, steril.): tractu Kundjan in montanis (*Tashiro*! Martio 1887, fl.).

DISTRIB. Japan, Formosa and the Himalayas.

ANACARDIACEÆ.

Rhus, L.

R. succedanea, L. Mant. II, p. 221; Thunb. Fl. Jap. p. 122; Roxb. Fl. Ind. II, p. 98; DC. Prodr. II, p. 68; Wight. Ic. Pl. Ind. Or. t. 560; Benth. Fl. Hongk. p. 69; Miq. Prol, Fl. Jap. p. 16; Franch. et Sav. Enum. Pl. Jap. I, p. 92; Hook. f. Fl. Brit. Ind. II, p. 12; Franch. Pl. David. I, p. 79; Forbes et Hemsl. Ind. Fl. Sin. I, p. 146; Henry, List Pl. Formos. p. 29.

Connarus junglandifolius, Hook. et Arn. Bot. Beech. Voy. p. 179.

Var. japonica, Engler, in DC. Monogr. Phanerog. IV, p. 399.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*).

INSULA UTCHINÂ (*Matsumura*! 1887, steril.): ad portum Nâfa in Idzunzatchi-mura, culta (*Yamada*! 1882).

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LEGUMINOSÆ.*

determinavit

J. Matsumura.

Thermopsis chinensis, Benth. S. Moore in Journ. Bot. 1878, p. 131; Hance in Journ. Bot. 1882, p. 4; Hemsl. in Journ. Linn. Soc. XXIII, p. 150, pro parte.

Planta viva foetida. Caulis teres glaber, ramis arcuato-patentibus; foliola supra glabra, subtus adpresse pilosa, stipulis petiolo multo brevioribus; calyx fructifer persistens vel deciduus sub lente adpresse pilosus; legumina matura linearia, coriacea, plana, acuta brevi stipitata, erecta vel subarcuata, adpresse pilosa, 15-sperma; semina ovoidea brunnea opaca.

Petioli 20-25 mm. longi, pilosi. Foliola terminalia supp. maxima 45 mm. longa, 15 mm. lata; stipulae 20 mm. longae, vix 5 mm. latæ. Calyx fructifer 8 mm. longus. Pedicelli ad 10 mm. longi. Legumina 60-85 mm. longa, 8 mm. lata; stipites 5-8 mm. longi.

Hab. Liukiu centrali: insula Okinawa, arenosis maritimis prope Kimm legerunt Tashiro et ipse; insula Ie-shima legit Tashiro; insula Kumeshima (H. Kuroiwa). Fr. Martio-Maio.

Obs. I. Species a cl. Hemsley l.c. cum T. fabacea, DC. conjuncta ex ea satis differt foliis stipulisque angustioribus, leguminibus subcoriaceis, seminibus ovoideis brunneis opacis.

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* In hoc indice adenumerantur stirpes Formosanæ, quae a botanicis T. Makino, K. Miyake, C. Owatari, Y. Tashiro, collectoribus S. Hiraoka, Dre. Honda, Y. Honda, S. Kawai, H. Kawakami, T. Niinami, Y. Satake, M. Ueno, S. Yokoyama, aliisque nuper in variis locis ejusdem insulæ lectae sunt.

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Obs. II. Thermopsis fabacea, DC. Prodr. II, p. 99; Ledeb. Fl. Ross. I, p. 511; Maxim. Prim. Fl. Amur. p. 78; Miq. Prol. p. 42; Fr. Schm. Reis. in Amur. p. 123; Iinuma, Soomoku-zusetsu XIII. t. 38. Hab. in Japonia: ins. Yezo: Zenibako (Y. Tokubuchi), Yubutsu (K. Miyabe), Urup, ins. Kurile (K. Uchida), Hakodate (R. Yatabe). In Hortis Tōkyōensibus saepissime culta. Legumina submembranacea subreticulata; semina plano-subrotunda flavida nitida.

Crotalaria ferruginea, Grah; Baker in Hook. f. Fl. Brit. Ind. II, p. 68; Hance in Journ. Bot. 1882, p. 4; Hemsl. in Journ. Linn. Soc. XXIII, p. 151; G. King in Journ. Asiat. Soc. Beng. LXVI (1897) p. 37; Trimen, Handbook Fl. Ceyl. II, 10; C. pilosissima, Miq. Fl. Ind. Bat. I, p. 327. *C. rufescens,* Franchet, Pl. David. p. 79 ex Hemsl. l.c.

Folia in sicco nigrescentia, elliptica vel ovato-elliptica vel oblonga, obtusa, supra punctata pilosa, stipulis ovatis acutis patentibus. Legumina 40 mm. longa, 15 mm. lata, oblonga obtusa, in sicco nigra glabra. Semina nigrescentia nitida.

Hab. in Formosa boreali: ad Sinteck (T. Makino), ad Pachina (Niinami, et Ueno no. 6, 40); Formosa orientali: in campis Tsuibi dictis jurisdictionis Taitoo legit Y. Tashiro. Fl. et fr. Septembri-Novembri.

Crotalaria linifolia, L. f. DC. Prodr. II, p. 128; Benth. Fl. Austr. II, p. 180; Miq. Fl. Ind. Bat. I, p. 342; Baker in Hook. f. Fl. Brit. Ind. II, p. 72; Hemsl. in Journ. Linn. Soc. XXIII, p. 151; Trimen, Fl. Ceyl. II, p. 13; Makino in Tōkyō Bot. Mag. IX. p. 61; Henry in Trans. Asiat. Soc. Jap. XXIV. Suppl. p. 30.

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Annua. Caulis bipedalis adpresse sericeus; folia brevissime petiolata, lineari-oblonga, obtusa, mucronata supra punctata parce pilosa, subtus adpresse sericea, stipulis nullis. Racemi 150 mm. longi. Calycis lobi postici connati, bracteis persistentibus subulatis, pedicellis brevioribus, reflexis vel patentibus. Legumina subglobosa, nigrescentia, glabra.

HAB. in Formosa orientali: jurisdictione Taitoo ad Tsuibi legit Y. Tashiro. Fl. et fr. Septembri.

Crotalaria formosana, Matsumura sp. nov.

Annua, exsiccatione viridescens. Caulis teres, basi ramosus, adpresse villosus. Folia simplicia, brevissime petiolata, oblonga vel oblongolinearia obtusa, emarginata vel mucronulata, supra punctulata, pilis longis adpresse pilosa, subtus adpresse sericea, stipulis minutissimis glanduliformibus instructa. Racemi longi, terminales, 4-26-flori, secundi, bracteis minutis subulatis reflexis vel patulis, pedicellis multoties brevioribus. Calyx sericeus flavescens, segmentis posticis ¼ partitis, quam antica latioribus obovato-ellipticis obtusis, anticis lanceolatis; corolla flava calyce brevior vel aequilonga; vexillum late cuneatum striatum brevissime unguiculatum, subretusum emarginatum extus pubescens; alæ vexillo breviores ellipticae vel oblongo-ellipticae brevi unguiculatæ; carinæ ovatæ rostratæ contortæ. Ovarium lineare recurvatum utrinque attenuatum; stylus inflexus apicem versus barbatus. Legumen oblongum, glabrum, pallidum, paulo exsertum vel fere inclusum, 10-spermum.

Pedicelli 3 mm. longi. Calyx 8 mm. longus. Ovarium 4 mm. longum; stylus 4 mm. longus. Legumen 10 mm. longum, 4 mm. latum.

Species C. tectæ, Roth. affinis, differt stipulis minutis instructis, corollis extus pubescentibus.

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Hab. in Formosa australi: in campis prope Tailan legit Y. Tashiro.

Crotalaria sessilifora, L. DC. Prodr. II, p. 129; Miq. Fl. Ind. Bat. I, p. 338; Baker in Hook. f. Fl. Brit. Ind. II. p. 73; Hemsl. in Journ. Linn. Soc. XXIII, p. 152; G. King in Journ. Asiat. Soc. Beng. LXVI. p. 36; Henry in Trans. Asiat. Soc. Jap. XXIV. Suppl. p. 30; *C. eriantha,* Sieb. et Zucc. in Abhandl. Akad. Wiss. IV. p. 121; Miq. Prol. p. 230; *C. Oldhami,* Miq. Prol. p. 230; *C. brevipes,* Champ. Benth. Fl. Hongk. p. 74.

Hab. in Formosa boreali: ad Sinteck legit T. Makino; ad Byolitsu legit Honda (no. 37); in Formosa orientali ad Tsuibi jurisdictionis Taitoo legit Y. Tashiro.

Crotalaria retusa, L.; DC. Prodr. II, p. 125; Roxb. Fl. Ind. III, p. 272; Miq. Fl. Ind. Bat. I, p. 330; Hook. et Arn. Bot. Beech, Voy. p. 180; Bot. Mag. t. 2561; Benth Fl. Hongk. p. 72; Baker in Hook. f. Fl. Brit. Ind. II, p. 75; Hemsl. in Journ. Linn. Soc. XXIII, p. 152; Trimen, Fl. Ceyl. II, p. 15; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 38; *Lupinus cochinchinensis,* Lour. Fl. Cochinch. II, p. 352; DC. Prodr. II, p. 410.

Specimina nostra palmaria, ramosa. Folia brevissime petiolata, obovata vel obovato-oblonga, cuneata, emarginata, mucronulata, supra glabra punctulata, subtus pilis brevissimis adpresse strigosa, 23-36 mm. longa, 9-18 mm. lata. Racemi 2-7-flori, bracteis subulatis reflexis. Calycis superiore labium bifidum, lobis ovatis acutis; inferiore tridentatum; corolla lutea; vexillum

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ad venas strigosum. Legumina oblonga, glabra, turgida, ad 35 mm. longa, 11 mm. lata, 13-sperma.

Hab. in Formosa australi: in campis jurisdictionis Hong-soang legit Y. Tashiro.

Crotalaria verrucosa, L. DC. Prodr. II, p. 125; Bot. Mag. t. 3034; Wight, Ic. t. 200; Miq. Fl. Ind. Bat. I, p. 331; Baker in Hook. f. Fl. Brit. Ind. II, p. 77; Hemsl. in Journ. Linn. Soc. XXIII, p. 153; Trimen, Fl. Ceyl. II, p. 15; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 39; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 30.

Hab. in Formosa australi: Hong-soang et Amping (H. Kawakami), Lengaliau, Shing-kang-tzoon, et Shihoon (C. Ōwatari); Tonsheekac, jurisdictionis Taichū (Y. Satake); Formosa orientali, jurisdictione Taitoo (Y. Tashiro, no. 8.) Fl. et fr. Decembri-Februari.

Piipactsoo (nom. indigen. ex Satake).

Crotalaria trifoliastrum, Willd. Roxb. Fl. Ind. III, 277; Wight Ic. t. 421; Miq. Fl. Ind. Bat. I, p. 344; Baker in Hook. f. Fl. Brit. Ind. II, p. 82; *C. medicaginea,* DC. Prodr. II, p. 133; *C. stricta,* Roth. DC. Prodr. II, p. 133.

Perennis. Caulis 1-2 pedalis pubescens. Foliola obovato-cuneata, retusa, subemarginata, mucronulata, supra glabra, subtus adpresse sericea, 8-12 mm. longa, 5-9 mm. lata, petiolis foliolis aequilongis. Racemi fructiferi 20-40 mm. longi, 4-12-flori. Calyx 3 mm. longus, segmentis lanceolatis, longitudine tubum superantibus. Legumina vix 5 mm. longa, pubescentia; semina nigra.

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Hab. in Formosa australi-orientali: in campis Pinang legit Y. Tashiro (no. 13.).

Crotalaria Saltiana, Andr.; G. King in Journ. Asiat. Soc. Beng. LXVI. p. 41; D. Prain in Journ. Asiat. Soc. Beng. LXVI. p. 353; *C. striata*, DC. Prodr. II, p. 131; Bot. Mag. t. 3200; Miq. Fl. Ind. Bat. I, p. 346; Baker in Hook. f. Fl. Brit. Ind. II, p. 84; Hemsl. in Journ. Linn. Soc. XXIII, p. 153; Trimen, Fl. Ceyl. II, p. 18; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 30; Iinuma, Soomoku Zusetsu, XIII, t. 35.

Hab. in Formosa australi: campis prope Nisoogyō jurisdictionis Tailan legit Y. Tashiro (no. 49). Fl. Aprili.

Melilotus parviflora, Desf.; DC. Prodr. II, p. 187; Hook. et Arn. Beech. Voy. p. 262; Ledeb. Fl. Ross. I, p. 538; Baker in Hook. f. Fl. Brit. Ind. II, p. 89; Franchet, Pl. David, p. 81; Hemsl. Journ. Linn. Soc. XXIII, p. 155.

Calyx florifer vix 2 mm., fructifer vix 3 mm. altus. Calycis dentes lanceolati nec deltoidei. Stipulæ lineari-lanceolatæ basi non dilatatæ, integerrimæ, 8 mm. longæ. Legumina glabra, reticulata.

Hab. insula Ōshima: ad pagum Naze legit T. Itō (no. 499, 558); insula Liukiu: Naha (Y. Tashiro), Yontanzan (ipse).

Medicago lupulina, L.; DC. Prodr. II, p. 172; Ledeb. Fl. Ross. I, p. 527; Baker in Hook. f. Fl. Brit. Ind. II, p. 90; Benth. Fl. Hongk. p. 75; Hemsl. in Journ. Linn. Soc. XXIII, p. 154.

Hab. Liukiu: insulis Miyako et Okinawa legit Y. Tashiro.

Lotus australis, Andr.; DC. Prodr. II, p. 212; Benth.

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Fl. Austral, II, p. 188; Bot. Mag. t. 1365; Makino in Tōkyō Bot. Mag. X, p. 57.

Flores albi. Legumina 25-50 mm. longa, 4 mm. lata, glabra.

Hab. Liukiu: insula Okinawa in littore marino prope pagum Kimm (Y. Tashiro et ipse); insula Ōshima, in pago Yuwan (Y. Tashiro); insula Kumeshima (H. Kuroiwa).

Indigofera linifolia, Retz.; DC. Prodr. II, p. 222; Wight, Ic. t. 313; Benth. Fl. Austral, II, p. 195; Baker in Hook. f. Fl. Brit. Ind. II, p. 92; Trimen, Fl. Ceyl. II, p. 22; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 31.

Hab. in Formosa boreali-orientali: in campis Kilai dictis, ad Beelonsan legit Y. Tashiro (no. 12); in monte Takaw legit C. Ōwatari.

Indigofera trifoliata, L. DC. Prodr. II, p. 223; Wight, Ic. t. 314; Benth. Fl. Austral. II, p. 107; Baker in Hook. f. Fl. Brit. Ind. II, p. 96; Hemsl. in Journ. Linn. Soc. XXIII. p. 157; Trimen, Fl. Ceyl. II, p. 24. *I. prostrata,* Willd. DC. Prodr. II, p. 233; Roxb. Fl. Ind. III, p. 373. *I. moluccana,* DC. Prodr. II, p. 232. *I. multicaulis,* DC. Prodr. II, p. 223. *I. peregrina,* DC. Prodr. II, p. 224, *I. sp. nov.* Makino in Tōkyō Bot. Mag. IX, p. 283.

Var. **Liukiuensis,** Matsumura, foliolis parvioribus, subtus sericeiis nec glaucis, petiolis longioribus.

Perennis. Caulis prostratus vel decumbens, pedalis, a basi ramosissimus. Foliola terminalia 7-14 mm. longa, 4-6 mm. lata; petioli 12 mm. longi. Flores coccinei; racemi 4-6-flori, brevissime pedicellati (5 vel 6 mm.). Calyx late campanulatus, canescens, segmentis triangulari-ovatis, acuminatis. Vexillum

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obovatum, acutiusculum, extus puberulum, intus punctatum, glabrum, 7 mm. longum; alae angustatæ; carinæ apice retusæ, pubescentes, punctatæ. Ovarium glabrum. Legumina quadrangularia, in sicco nigrescentia, marginata, adpresse parceque sericea, reflexa, non torulosa, 10-22 mm. longa, 6-8-sperma. Semina fusca, glabra.

Hab. in Liukiu: insula Okinawa ad Naha legerunt Y. Tashiro anno 1887, T. Itō anno 1894 (no. 910) et ipse anno 1897.

Indigofera trita, L. f. DC. Prodr. II, p. 232; Roxb. Fl. Ind. III, p. 371; Wight, Ic. t. 315, 386; Benth. Fl. Austral. II, p. 197; Baker in Hook. f. Fl. Brit. Ind. II, p. 96; Hemsl. in Journ. Linn. Soc. XXIII. p. 158; Trimen, Fl. Ceyl. II, p. 26; I. cinerea, Willd. DC. Prodr. II. p. 232. *I. timoriensis,* Willd. DC. Prodr. II. p. 223. *I. canescens,* Lamk. DC. Prodr. II, p. 224, non Wall. *I. hedysaroides,* Lamk. DC. Prodr. II, p. 232. *I. arcuata,* Willd. DC. Prodr. II, p. 232. *I. rigida,* Willd. DC. Prodr. II, p. 224. *I. Leschenaultii,* DC. Prodr. II, p. 223. *I. virgata,* DC. Prodr. II, p. 224, non Roxb.

Caulis altior quam praecedens, adscendens. Foliola terminalia 10, 17, 20 mm. longa, 4-6 mm. lata, petiolulata, petiolulis ad 5 mm. longis. Racemi 6 mm. longi. Legumina quadrangularia, marginata, deflexa, 15-20 mm. longa, 6-9-sperma.

Hab. in Liukiu: locis maritimis ad Naha legit T. Itō, (no. 910.) Mense Julio fr. mat.

Indigofera hirsuta, L. DC. Prodr. II, p. 228; Roxb. Fl. Ind. III, p. 376; Benth. Fl. Hongk. p. 76; Benth. Fl. Austral. II, p. 198; Baker in Hook. f. Fl. Brit. Ind. II, p. 98; Hemsl.

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in Journ. Linn. Soc. XXIII. p. 157; Trimen, Fl. Ceyl. II, p. 26; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 81; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 31.

Hab. in Formosa australi: Hong-soang (C. Ōwatari), in territorio inculto Subonsha dicto legit C. Ōwatari; Sensooleishoo (H. Kawakami, no. 27, 45.)

Indigofera tinctoria, L. DC. Prodr. II, p. 224; Roxb. Fl. Ind. III, p. 379; Wight, Ic. t. 365; Baker in Hook. f. Fl. Brit. Ind. II, p. 99; Bentl. et Trim. Med. Pl. t. 72; Hemsl. in Journ. Linn. Soc. XXIII, p. 157; Trimen, Fl. Ceyl. II, p. 26; Prain in Journ. Asiat. Soc. Beng. LXVI, p. 356; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 81; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 31.

Hab. in Formosa boreali: ad Shinteck culta, (T. Hiraoka, Y. Honda (no. 117), T. Makino).

Indigofera Anil, L. DC. Prodr. II, p. 225; Benth. Fl. Hongk. p. 77; Baker in Hook. f. Fl. Brit. Ind. II, p. 99; Hemsl. in Journ. Linn. Soc. XXIII, p. 155; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 81; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 31.

Hab. in Formosa boreali: prope Taipe legerunt T. Makino et C. Ōwatari; Shinteck (T. Makino); Tamsui (T. Makino); in Formosa australi: Hong-soang (H. Kawakami, no. 241); inter Koo-choo et Shinten-kui (K. Miyake).

Indigofera galegoides, DC. Prodr. II, p. 225; Baker in Hook. f. Fl. Brit. Ind. II, p. 100; G. King in Journ. Asiat.

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Soc. Beng. LXVI, p. 82; Trimen, Fl. Ceyl. II, p. 28. *I. uncinata*, Roxb. Fl. Ind. III, p. 382.

Var. **Liukiuensis**, Matsumura.

Suffrutescens erecta ultra 4-pedalis ramosa, ramis lignosis, ramulis juvenilibus adpresse sericeis demum glabrescentibus, teretibus vel subangulatis. Folia petiolata imparipinnata interdum abortu pari-pinnata; foliola plerumque 13, ovato-oblonga vel oblonga rarius elliptica, mucronata supra viridia, subtus glauca pilis adpressis parce vestita. Racemi erecti, foliis multo breviores, pluriflori, haud densi, pedicellis patentibus. Calyx subcampanulatus inaequalis; calycis dentes tubo breviores, deltoidei, acuti, fusco-pubescentes. Corolla calyce quarter longiora; vexillum elliptico-rotundatum, extus pubescens, intus glabrum; alæ obovato-oblongæ obtusæ vexillo breviores; carinæ obovato-oblongæ subacutæ, extus pubescentes acute auriculatæ. Ovarium lineare, sessile. Legumina matura linearia, adsendentia, turgida, juniora plana, adpresse pilosula, brevi rostrata, 5-10-sperma.

Folia 10-14 cm. longa, petiolis 1½-2 cm. longis. Racemi 4-6 cm. longi. Flores ca. 1 cm. longi. Pedicelli fructiferi 3 mm. longi. Vexillum 1 cm. longum, 8 mm. latum. Alæ 6-7 mm. longæ, 2½ mm. latæ. Carinæ 7-8 mm. longæ, 6 mm. latæ. Stamina 9 mm. longa. Ovarium 9-10 mm. longum. Legumina 2½-4 cm. longa, 4-5 mm. lata.

Hab. in Liukiu: insula Iriomote legit S. Tanaka (no. 338) anno 1890; insula Kubama, Yaeyama legit T. Itō (no. 1375, 1386) anno 1894.

Indigofera macrostachya, Vent.? DC. Prodr. II, p. 226; Bunge, Enum. Pl. Chin. Bor. p. 16; Baker et S. Moore in Journ. Linn. Soc. XVII, p. 381; Franchet, Pl. David. p. 82.

Caulis angulatus. Folia 80 mm. longa, in sicco viridescentia; foliola 15, oblonga, 20 mm. longa, 6 mm. lata, stipel-

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lis minutis. Racemi angulato-striati, 160-185 mm. longi, pedunculis 20-30 mm. longis suffulti. Legumina deflexa, brevissime pedicellata, 15-20 mm. longa, recta vel incurva, pilis albis brevissimisque parce vestita, 8-9-sperma; semina viridi-flavida.

Hab. in Formosa: loco non indicato legit Dr. Honda.

Milletia reticulata, Benth. Hance in Journ. Linn. Soc. XIII, p. 101; Hemsl. in Journ. Linn. Soc. XXIII, p. 159; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 32. *M. purpurea,* Yatabe, in Tōkyō Bot. Mag. VI. p. 379, t. 12; Shitsumon-Honzoo-Furoku, fol. 14 sub. nomine *Sakukoo.*

Folia 3-4 juga, in sicco viridescentia vel nigrescentia; foliola valde variabilia, oblonga, elliptica vel rotundata, obtusa, emarginata, glabra vel supra ad venas pilis conspersa. Racemi densiflori, villosi; pedicelli calyce sublongiores bracteis bractiolisque ovatis, subsericeis. Calyx urceolato-campanulatus, obliquus, glabrus, in vivo rubro suffusus; labium posticum connatum, anticum subtrifidum, dentibus deltoideis brevissimis, obtusis, ciliolatis. Corolla longe exserta; vexillum atropurpureum, ellipticum, basi flavidum, erectum margine involutum, unguiculatum; alæ carinas subæquantes, intense purpureæ. Stamina diadelpha. Ovarium lineare, obscure stipitatum, multiovulatum; stylus ovario multoties brevior, incurvus, glabrus, stigmate capitato. Legumina linearia, plana, lignosa, glabra, dehiscentia, apiculata, 65-140 mm. longa, 10-25 mm. lata, 5-9-sperma; semina plano-rotundata, nigrescentia, nitida.

Keu-tsan-lin (nom. indigen. ex Satake), *Koat-ting* 苅藤 (ex Ueno).

Hab. in Formosa boreali: Kelung, Pikoh, Tamsui (T.

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Makino), prope Taipe (C. Ōwatari), Chukoo (Y. Honda, no. 93); Pachina (Ueno, no. 56); in Formosa centrali: Hokukookei, Unlin, Linkipo (C. Ōwatari), jurisdictione Taichu (Y. Satake); Taitonsan (Y. Tashiro); insula Liukiu (ex libro Shitsumonhonzoo-furoku). Fr. Decembri.

Tephrosia purpurea, Pers. DC. Prodr. II, p. 251; Benth. Fl. Hongk. p. 78; Benth. Fl. Austral. II, p. 209; Baker in Hook. f. Fl. Brit. Ind. II, p. 112; Hemsl. in Journ. Linn. Soc. XXIII, p. 158; Trimen, Fl. Ceyl. II, p. 31; G. King in Journ. Asiat. Soc. Beng, LXVI, p. 85; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 32. *T. leptostachya,* DC. II, p. 251. *T. lancœfolia,* Link. DC. Prodr. II, p. 251. *Galega purpurea,* L. Roxb. Fl. Ind. III, p. 386. *G. lancœfolia,* Roxb. Fl. Ind. III, p. 386. *G. Colonila* et *sericea,* Ham. in Linn. Trans. XIII, p. 544-5. *G. tinctoria,* Lamk. Roxb. Fl. Ind. III, p. 386, non L.

Hab. in Formosa australi: in campis Pinang (Y. Tashiro), ad pedem montis Takaw (C. Ōwatari), Sensooleisho (H. Kawakami, no. 9). Fr. Sept.-Febr.

Sesbania ægyptica, Pers. DC. Prodr. II, p. 264; Wight, Ic. t. 32; Benth. Fl. Austral. II, p. 212; Bedd. Fl. Sylv. Part XV. Anal. Gen. t. 12, fig. 3; Baker in Hook. f. Fl. Brit. Ind. II, p. 114; Hemsl. in Journ. Linn. Soc. XXIII, p. 162; Trimen, Fl. Ceyl. II, p. 34; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 32. *Aeschinomene Sesban,* L. Roxb. Fl. Ind. III, p. 332. *Coronilla Sesban,* Willd. Sp. III, p. 1147.

臭菁仔 (nom. indigen. ex Ōwatari).

Hab. in Formosa boreali: Tamsui (T. Makino), Pachina (D. Awano); in Formosa australi: prope Lengalyau legit C.

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Ōwatari, ad pedem montis Takaw (C. Ōwatari), Heng-tsong (C. Ōwatari).

Astragalus sinicus, L. Bot. Mag. t. 1350; Hemsl. in Journ. Linn. Soc. XXIII. p. 166; Henry in Asiat. Soc. Jap. XXIV, Suppl. p. 32. *A. lotoides,* Lam. DC. Prodr. II, p. 282; Kurz in Journ. Bot. 1873, p. 193.

Hab. in Formosa boreali: Pachiana (Niinami et Ueno, no. 66). Fl. Martio.

Lespedeza Buergeri, Miq. Prol. Fl. Jap. p. 235; *L. Oldhami,* Miq. Prol. Fl. Jap. p. 236; Maxim. in Acta Horti. Petrop. II, p. 354; Hemsl. in Journ. Linn. Soc. XXIII, p. 179.

Var. **Oldhami,** Maxim. l.c. p. 354.

Caulis griseo-brunneus. Foliola elliptica vel oblongo-elliptica, obtusa, emarginata, subtus glauca, petiolulis tomentosis. Legumina oblanceolata, brevi stipitata, 10-13 mm. longa, 4-5 mm. lata, pubescentia; semina oblongo-reniformia, nitida, nigro variegata.

Hab. in Formosa centrali: locis arenosis fluminis Daksuikei legit C. Ōwatari anno 1898. Fr. Januario.

Lespedeza virgata, DC. Prodr. II, p. 350; Maxim. in Acta Horti. Petrop. II, p. 362; Hemsl. in Journ. Linn. Soc. XXIII, p. 183; Miq. Prol. Fl. Jap. p. 237; Fr. et Sav. Enum. Pl. Jap. I, p. 102. *Hedysarum virgatum,* Thunb. Fl. Jap. p. 288.

Hab. in Formosa orientali: in campis Kilai jurisdictionis Taitoo legit Y. Tashiro. Fl. Augusto.

Lespedeza chinensis, Don. Maxim. in Acta Horti. Petrop.

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II, p. 367; Hook. et Arn. Bot. Beech. Voy. p. 181; Hemsl. in Journ. Linn. Soc. XXIII, p. 180; Henry in Trans. Asiat. Soc, Jap. XXIV, Suppl. p. 34.

Hab. in Formosa boreali: Tamsui (T. Makino). Fr. Novembri.

Lespedeza juncea, Pers. DC. Prodr. II, p. 348; Maxim. in Acta Horti. Petrop. II, p. 370; Baker in Hook. f. Fl. Brit. Ind. II, p. 142; Hemsl. in Journ. Linn. Soc. XXIII, p. 181; T. Makino in Tōkyō Bot. Mag. X, p. 59; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34. *L. sericea,* Miq. Prol. Fl. Jap. p. 237; Maxim. l.c. p. 368. *L. cuneata,* G. Don, Benth. Fl. Hongk. p. 85; Hook. et Arn. Bot. Beech. Voy. p. 262.

Var. **sericea** Hemsl. l.c. p. 181.

Sooroo-hahshi (nom. indigen. Liuk.) ex Yamada.

Hab. in Formosa boreali: Taipe (T. Makino), Chukoo (Y. Honda, no. 97); Liukiu: Naha (Yamada, T. Itō, no. 849), ins. Okinawa (Y. Tashiro, Nakagawa, no. 92); prope Shuri (K. Miyake). Mense Augusto fl.

Lespedeza striata, Hook. et Arn. Bot. Beech. Voy. p. 262; Benth. Fl. Hongk. p. 85; Miq. Prol. Fl. Jap. p. 237; Fr. et Sav. Enum. Pl. Jap. I, p. 102; Maxim. in Acta Horti Petrop. II, p. 382; Hemsl. in Journ. Linn. Soc. XXIII, p. 182; T. Makino in Tokyo Bot. Mag. X, p. 63; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34. *L. stipulacea,* Maxim. Prim. Fl. Amur. p. 85 et 470. *Hedysarum striatum,* Thunb. Fl. Jap. p. 289.

Hab. in Formosa boreali: Kelung, Taipe (T. Makino);

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Liukiu: ins. Okinawa (Y. Tashiro); ins. Erabu jugo Miyako (T. Itō, no. 1212, 1237).

Zornia diphylla, Pers. Benth. Fl. Hongk. p. 80; Benth. Fl. Austral. II, p. 228; Baker in Hook. f. Fl. Brit. Ind II, p. 147; Maxim. in Mel. Biol. XII, p. 436; Hemsl. in Journ. Linn. Soc. XXIII, p. 171; Trimen, Fl. Ceyl. II, p. 35; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 126; *Z. angustifolia,* Smith; DC. Prodr. II, p. 316. *Z. dictyocarpa,* DC. Prodr. II, p. 327. *Hedysarum diphyllum,* L; Roxb. Fl. Ind. III, p. 353; Lour. Fl. Cochinch. II, p. 548.

Hab. in Formosa orientali: in campis Tsuibi dictis jurisdictionis Taitoo legit Y. Tashiro (no. 14). Mense Septembri fr. mat.

Smithia sensitiva, Ait.; DC. Prodr. II, p. 323; Roxb. Fl. Ind. III, p. 342; Hance in Journ. Bot. 1878, p. 226; Baker in Hook. f. Fl. Brit. Ind. II, p. 148; Maxim. in Mel. Biol. IX, p. 58; Hemsl. in Journ. Linn. Soc. XXIII, p. 170; Trimen, Fl. Ceyl. II, p. 37; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 126; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 32.

Hab. in Formosa boreali: Pikoh, Shinteck (T. Makino), Byōlitsu (Y. Honda, no. 40); in Formosa orientali: in campis Taihaloo dictis jurisdictionis Taitoo (Y. Tashiro, no. 3, A.) Sept.-Novemb. fl.

Arachis hypogæa, L. Hemsl. in Journ. Linn. Soc. XXIII, p. 171; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 32.

Hab. in Liukiu: insula Kubama archipel. Yaeyama cult. (T. Itō. no. 1384); in Formosa boreali: Taipe (T. Makino); in Formosa australi: Hong-soang (H. Kawakami, no. 258) culta.

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Aeschynomene indica, L. DC. Prodr. II, p. 320; Wight, Ic. t. 405; Benth. Fl. Hongk. p. 79; Baker in Hook. f. Fl. Brit. Ind. II, p. 151; Benth. Fl. Austral. II, p. 226; Hemsl. in Journ. Linn. Soc. XXIII, p. 170; Franch Pl. David. p. 97; Trimen, Fl. Ceyl. II, p. 38; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 128; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 32. *A. pumila,* L. DC. Prodr. II, p. 321; *A. diffusa,* Willd. DC. Prodr. II, 321. *Hedysorum Neli-Tali,* Roxb. Fl. Ind. III, p. 365. *Smitha aspera,* Roxb. Fl. Ind. III, p. 343.

Hab. in Liukiu: inter Tchatan et Unna legit T. Itō, no. 985; in Formosa boreali: ad Taipe legit T. Makino, Pachina (T. Niinami et M. Ueno, no. 19, B.); inter Keibi et Shinkookui (K. Miyake).

Ormocarpum glabrum, Teysm. et Binnen. Nat. Tiid. Ned. Ind. XXVII, p. 56; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 127; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 379.

Ramuli pallidi. Foliola 9-15; stipulæ ovatæ acuminatæ striatæ. Racemi foliis multo breviores; bractæ ovato-lanceolatæ margine ciliolatæ. Calyx campanulatus glaber, 10 mm. longus, segmentis inferioribus oblongis acutis, 7 mm. longis. Corolla flavida, purpureo striata, 18-20 mm. alta; vexillum ovale obtusum, 18 mm. longum, 15 mm. latum, unguiculatum, ungue incrassato; alæ ellipticæ obtusæ, 17 mm. longæ, longius unguiculatæ; carinæ ellipticæ longius unguiculatæ, obtusiusculæ longitudine alas æquantes. Ovarium lineare, glabrum, planum, 7-spermum, stipite et stylo incluso, 22 mm. longum. Legumina 6-9 cmm. longa, in sicco nigrescentia, glabra, longitudinaliter striata; stipites 8 mm. longi.

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Hab. in Liukiu: locis maritimis prope Oura tractus Kushimajiri legit S. Tanaka, no. 214; in eadem loco (ipse); insula Miyako legit S. Tatitu (Herb. Itō, no. 1239); prope Naha legit T. Itō (no. 850, 851)-culta; in Formosa boreali: ad Hau-hyac-soang, prope Kelung legerunt T. Makino et C. Ōwatari.

Pycnospora hedysaroides, R. Br. Benth. Fl. Hongk. p. 91; Benth. Fl. Austral. II, p. 236; Baker in Hook. f. Fl. Brit. Ind. II, p. 153; Hemsl. in Journ. Linn. Soc. XXIII, p. 177; Trimen, Fl. Ceyl. II, p. 41; Henry in Trans. Asiat Soc. Jap. XXIV, Suppl. p. 34.

Hab. in Formosa orientali: in campis Kale-en dictis tractus Kilai; in campis Bee-lin-soang jurisdictionis Taitoo legit Y. Tashiro.

Lourea obcordata, Desv. DC. Prodr. II, p. 324; Benth. Fl. Hongk. p. 82; Benth. Fl. Austral. II, p. 238; Miq. Fl. Ind. Bat. I, p. 265; Baker in Hook. f. Fl. Brit. Ind. II, p. 154; Hemsl. in Journ. Linn. Soc. XXIII, p. 178; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34. *L. reniformis,* DC. Prodr. II, p. 324. *Hedysarum reniforme,* Lour. Fl. Cochinch. II, p. 545.

Hab. in Liukiu: ad pedem montis Urabu, ins. Yonakuni legit S. Tanaka (no. 392), Kuroshima, ins. Yaeyama legit T. Itō (no. 1377); in Formosa australi: Tamsui (T. Makino). Mense Augusto-Novembri fr. mat.

Uraria picta, Desv. Journ. Bot. III, p. 123; DC. Prodr. II, p. 324; Benth. Fl. Austral, II, p. 237; Baker in Hook. f. Fl. Brit. Ind. II, p. 115; Hemsl. in Journ. Linn. Soc. XXIII, p. 178; Trimen, Fl. Ceyl. II, p. 42; G. King in Journ. Asiat. Soc.

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Beng. LXVI, p. 130; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34. *U. linearis*, Hassk. Pl. Jav. Rar. p. 349. *Doodia picta*, Roxb. Fl. Ind. III, p. 368.

Foliola 13-½ cm. longa, 10 mm. lata, albo-variegata. Legumina 4-articulata, in sicco nigrescentia.

Hab. in Liukiu: insula Miyako legit Y. Tashiro; insula Yaeyama ad pagum Nagura legit S. Tanaka (no. 279); insula Ishigaki legit T. Itō (no. 1279), Mense Junio-Augusto fl. et fr.

Uraria crinita, Desv. Journ. Bot. I, p. 123; DC. Prodr. II, p. 324; Benth. Fl. Hongk. p. 81; Hassk. Pl. Jav. Rar. p. 351; Miq. Fl. Ind. Bat. I, p. 268; Baker in Hook. f. Fl. Brit. Ind. II, p. 155; Hemsl. in Journ. Linn. Soc. XXIII, p. 177; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 130; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34. *U. comosa*, DC. Prodr. II, p. 324. *U. picta*, Wight, Ic. t. 411, non Desv. *Doodia crinita*, Roxb. Fl. Ind. III, p. 369. Curtis, Bot. Mag. (1894) t. 7377.

Racemi floriferi 71 cm. longi, 3½ cm. lati; fructiferi 44 cm. longi, 2 cm. lati. Foliola 3-7, fere 10 cm. longa, 5½ cm. lata. Legumina 4-articulata, pallida.

Hab. in Liukiu: insula Yaeyama legit Y. Tashiro; insulis Kubama et Uchibanari legit T. Itō (no. 1376, 1483); insula Iriomote legit S. Tanaka (no. 335); in Formosa boreali: ad Pachina legerunt. T. Niinami et M. Ueno. Mense Majo-Augusto fl. et fr.

Uraria hamosa, Wall. Wight, Ic. t. 284; Miq. Fl. Ind. Bat. I, p. 270; Baker in Hook. f. Fl. Brit. Ind. II, p. 156; Hemsl. in Journ. Linn. Soc. XXIII, p. 177; Trimen, Fl. Ceyl.

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II, p. 43; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34. *Doodia hamosa*, Roxb. Fl. Ind. III, p. 367.

Var. **formosana** Matsumura.

Foliola elliptica retusa vel oblonga mucronata basi subcordata, 4 cm. longa, 3 cm. lata. Racemi fructiferi 15 cm. longi, 15 mm. lati. Calyx 4 mm. altus. Legumina 4, 5, 6-articulata, in sicco nigrescentia. Pedicelli 8-12 mm. longi.

Hab. in Formosa orientali: in jurisdictione Taitoo legit Y. Tashiro (no. 10).

Alysicarpus vaginalis, DC. Prodr. II, p. 353; Benth. Fl. Hongk. p. 80; Benth. Fl. Austral. II, p. 239; Miq. Fl. Ind. Bat. I. p. 231; Baker in Hook. f. Fl. Brit. Ind. II, p. 158; Hemsl. in Journ. Linn. Soc. XXIII, p. 179; Trimen, Fl. Ceyl, II, p. 44; G. King in Journ. Asiat. Soc Beng. LXVI, p. 132; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34. *A. numularifolius*, DC. Prodr. II, p. 353.

Specimnibus e Liukiu: foliis omnibus oblongo-lanceolatis acutis subtus adpresse pubescentibus, petiolis 10 mm., stipulis 17 mm., calycibus 5 mm. longis; e Shinteck, Byolitsu et Pachina: foliis elliptico-rotundatis oblongo-linearibus intermixtis, racemis laxioribus, seminibus oblongo-ellipticis aurantiacis nitidis, brunneo-variegatis; ex Tamsui: foliis omnibus elliptico-rotundatis, racemis densioribus, 13 cm. longis, leguminibus 2½ cm. longis, puberulis, seminibus elliptico-retusis.

Hab. in Liukiu: insula Ishigaki (S. Tanaka); insula Kuroshima (T. Itō, no. 1378); in Formosa boreali: Shinteck, Taipe. Pechina, Tamsui (T. Makino); Byolitsu (H. Kawakami, no. 19, Y. Honda, no. 46, 84); in Formosa australi: Fongkang, Chahjoh, Tailang, Takaw, Soobonsha (C. Ōwatari).

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Desmodium umbellatum, DC. Prodr. II, p. 325; Benth. Fl. Austral. II, p. 230; Bedd. Fl. Sylv. p. 87; Baker in Hook. f. Fl. Brit. Ind. II, p. 161; Maxim. in Mel. Biol. XII, p. 438; Hemsl. in Journ. Linn. Soc. XXIII, p. 177; Trimen, Fl. Ceyl. II, p. 47; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 137. *D. australe,* DC. Prodr. II, p. 326. *Hedysarum arboreum,* Roxb. Fl. Ind. III, p. 361.

胡繩翼 (nom. indigen. Formos.) ex Kawai.

Hab. in Liukiu: insula Okinawa, Naha (Y. Tashiro, S. Tanaka, no. 9., T. Itō, 848, 907), insula Iriomote (S. Tanaka, no. 337); in Formosa australi: territorio indomito Kajilai-sha dicto legit C. Ōwatari; loco non adnotato (S. Kawai).

Desmodium Cephalotes, Wall. Wight, Ic. t. 373; Bedd. Fl. Sylv. Anal. Gen. Pl. II, t. 4; Baker in Hook. f. Fl. Brit. Ind. II, p. 161; Hance in Journ. Bot. (1880) p. 260; Maxim. in Mel. Biol. XII, p. 438; Hemsl. in Journ. Linn. Soc. XXIII, p. 171; Trimen, Fl. Ceyl. II, p. 47; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 33.

Var. **typica,** Prain in Journ. Asiat. Soc. Beng. LXVI, p. 389. *Hedysarum Cephalotes,* Roxb. Fl. Ind. III, p. 360.

Legumina canescentia 2, 3, 4-articulata, 9-15 mm. longa, recurvata.

Hab. in Formosa australi: monte Takaw legit C. Ōwatari.

Desmodium pulchellum, Benth. Fl. Hongk. p. 83; Benth. Fl. Austral. II, p. 231; Baker in Hook. f. Fl. Brit. Ind. II, p. 162; Maxim. in Mel. Biol. XII, p. 438; Hemsl. in Journ. Linn. Soc. XXIII, p. 175; Trimen, Fl. Ceyl. II, p. 48; G. King in Journ. Asiat. Soc. LXVI, p. 136; Henry in Trans. Asiat.

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Soc. Jap. XXIV, Suppl. p. 33. *Hedysarum pulchellum*, L.; Lour. Fl. Cochinch. II, p. 548; Roxb. Fl. Ind. III, p. 361. *Dicerma pulchellum*, DC. Prodr. II, p. 339; Wight, Ic. t. 418.

Hab. in Liukiu: insula Okinawa, inter Tchatan et Unna legit T. Itō, no. 986; in Formosa boreali: Shinteck (T. Makino, S. Hiraoka), Byolitsu (Y. Honda, no. 85); in Formosa orientali: Taishoo jurisdictionis Taitoo (Y. Tashiro, no. 9); in Formosa australi: Hong-soang (H. Kawakami, no. 26).

Desmodium laburnifolium, DC. Prodr. II, p. 337; Baker in Hook. f. Fl. Brit. Ind. II, p. 163; Moore in Journ. Bot. (1875) p. 230; Hance in Journ. Bot. (1878) p. 9; Maxim. in Mel. Biol. XII, p. 439; Hemsl. in Journ. Linn. Soc. XXIII, p. 173; Trimen, Fl. Ceyl. II, p. 48; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 33; Iinuma, Soomoku-zusetsu XIV, t. 26.

Obs. *Hedysarum racemosum*, Thunb. Fl. Jap. p. 285, Syn. ex Maxim. l. c., sed legumina nec laevia ut Thunberg descripsit.

Hab. in Liukiu: Ōshima, Itsube (Yamada); Ōshima et Okinawa (Y. Tashiro); insula Ishigaki (T. Itō, no. 1275); in Formosa boreali: Kelung (T. Itō, no. 1275); in Formosa boreali: Kelung (T. Makino et C. Ōwatari).

Desmodium pseudotriquetrum, DC. Prodr. II, p. 326; G. King, Andot. in Journ. Asiat. Soc. Beng. LXVI, p. 145; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 390. *D. triquetrum*, Roxb. Fl. Ind. III, p. 347, non L.

Legumina stipitata glabra, ad suturas utrosque adpresse villoso-ciliata, 7-articulata, in sicco brunnea.

Hab. in Formosa orientali: jurisdictione Taitoo, ad Beelon-

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soang tractus Kilai legit Y. Tashiro (no. 15, A.) anno 1894. Mense Augusto fl. et mat.

Desmodium gracillimum, Hemsl. in Ann. Bot. IX, p. 152.

Specimen unicum absque flore misit cl. Henry.

Hab. in Formosa australi: Takaw (Henry, no. 1160).

Desmodium laxiflorum, DC. Prodr. II, p. Prodr. II, p. 335; Baker in Hook. f. Fl. Brit. II, p. 164; Maxim. in Mel. Biol. XII, p. 440; Hemsl. in Journ. Linn. Soc. XXIII, p. 173; Trimen, Fl. Ceyl. II, p. 51; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 141; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 33. *D. recurvatum,* Grah.; Wight, Ic. t. 374. *D. diffusum,* DC. Prodr. II, p. 335, non 336; Wight, Ic. t. 409. *Hedysarum recurvatum,* Roxb. Fl. Ind. III, p. 358. *H. diffusum,* Roxb. Fl. Ind. III, p. 357.

Legumina speciminibus nostris 2-7-articulata.

Hab. in Formosa boreali: Kelung (T. Makino et C. Ōwatari), inter Koo-choo et Shinten-kui (K. Miyake). Mense Novembri fl. et fr.

Desmodium oxyphyllum, DC. Prodr. II, p. 336; D. Prain in Journ. Asiat. Soc. Beng, LXVI, p. 392. *D. japonicum,* Miq. Prol. p. 234; Franchet, Pl. David p. 94. *D. podocarpum,* Baker in Hook. f. Fl. Brit. Ind. II, p. 165; Hemsl. in Journ. Linn. Soc. XXIII, p. 174, pro parte non DC. *D. podocarpum,* var. *japonicum,* Maxim. in Mél. Biol. XII, p. 441. *Hedysarum caudatum,* Thunb. Fl. Jap. p. 286, ex Maxim. Iinuma, Soomoku-zusetsu XIV. t. 24.

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Var. **japonicum,** Matsumura, stipulis subulatis, pedicellis floriferis vix 4 mm. longis, stipitibus pedicellis brevioribus.

Hab. insula Ōshima, legit Y. Tashiro anno 1887. Mense Septembri fl.

Desmodium Tashiroi, Matsumura sp. nov. AD. laxo, DC. et D. oxyphyllo, DC. differt pedunculis e caulis basi ortis. Suffrutex. Caulis supp. 30 cm. altus, sursum angulatus puberulusque. Folia longe petiolata; foliola ovato-oblonga, acuminata, 8½-10 cm. longa, 2½-4 cm. lata, basi cuneata supra glabra, subtus obscure albo-maculata; terminalia triplinervata; lateralia subobliqua. Pedunculi 1-2, 60 cm. longi, subramosi, glabrescentes, aphylli; pedicelli 10-15 mm. longi, plerumque fasciculati. Calyx campanulatus. Legumen immaturum; articuli 3; stipes 6-plo longior quam calycem.

Hab. in Liukiu: insula Okinawa legit Y. Tashiro anno 1887.

Desmodium laxum, DC. Prodr. II, p. 336; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 138; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 392. *D. Gardneri,* Benth. Baker in Hook. f. Fl. Brit. Ind. II, p. 165; Maxim. in Mel. Biol. XII, p. 441; Hemsl. in Journ. Linn. Soc. XXIII, p. 172; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 33. *D. podocarpum,* Miq. Prol. p. 234, non DC. *D. podocarpum,* var. *laxum,* Baker in Hook. f. Fl. Brit. Ind. II, p. 165.

Pedicelli 3, 6, 8, 12 mm. longi. Stipites 7-9 mm. longi. Stipulæ lanceolatæ, acuminatæ.

Hab. in Liukiu (Y. Tashiro); in Formosa boreali: Pachina (T. Niinami et M. Ueno, no. 15, 91, B.); Pikoh et Shizangan (T. Makino); inter Koo-choo et Shinten-kui (K. Miyake).

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Desmodium sinuatum, Bl. Baker in Hook. f. Fl. Brit. Ind. II, p. 116; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 394; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 33.

Hab. in Formosa boreali: Pikoh (T. Makino); in Formosa centrali: inter Washa et Tongfoo legit Dr. Honda, no. 136; inter Shinten-kui et Shookakutoo (K. Miyake).

Desmodium gangeticum, DC. Prodr. II, p. 327; Benth. Fl. Hongk. p. 84; Benth. Fl. Austral. II, p. 232; Baker in Hook. f. Fl. Brit. Ind. II, p. 168; Maxim. in Mel. Biol. XII, p. 443; Trimen, Fl. Ceyl. II, p. 51; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 399; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 33; Wight, Ic. t. 271. *D. latifolium,* Wight, Ic. t. 272, non t. 270. *Hedysarum gangeticum,* L.; Roxb. Fl. Ind. III, p. 349; Lour. Fl. Cochinch. II, p. 547. *H. collinum,* Roxb. Fl. Ind. III, p. 349.

Hab. in Formosa australi: in bambusetis ad Hong-soang legit H. Kawakami, no. 80. Mense Januario fr. mat.

Desmodium polycarpum, DC. Prodr. II, p. 334; Hook. et Arn. Bot. Beech. Voy. p. 180; Benth. Fl. Hongk. p. 84; Benth. Fl. Austral. II, p. 235; Baker in Hook. f. Fl. Brit. Ind. II, p. 171; Maxim. in Mel. Biol. XII, p. 443; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 140; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 33; Wight, Ic. t. 406. *D. siliquosum,* DC. Prodr. II, p. 336. *D. heterocarpum,* DC. Prodr. II, p. 337; Trimen, Fl. Ceyl. II, p. 53. *D. gyroides,* Hassk. Pl. Jav. Rar. p. 362, non DC. *D. Buergeri,* Miq. Prol. p. 233. *D. patens,* Wight, Ic. t. 407. *D. Thunbergii,* DC. Prodr. II, p. 337. *Hedysarum heterocarpon,* L.; Thunb. Fl.

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Jap. p. 287. *H. purpureum*, Roxb. Fl. Ind. III, p. 358. *H. patens*, Roxb. Fl. Ind. III, p. 362.

Hab. in Liukiu: insula Okinawa (Y. Tashiro, ipse), prope Unna et monte Nago (T. Itō, no. 987, 1113); insula Ishigaki (T. Itō, no. 1278); insulis Kumeshima et Iheya (H. Kuroiwa); in Formosa boreali: Taipe, Pikoh, Shinteck (T. Makino); Pachina (M. Ueno, no. 69, B.); inter Koo-choo et Shinten-kui (K. Miyake).

Desmodium triflorum, DC. Prodr. II, p. 334; Benth. Fl. Hongk. p. 83; Baker in Hook. f. Fl. Brit. Ind. II, p. 173; Maxim. in Mel. Biol. XII, p. 444; Hemsl. in Journ. Linn. Soc. XXIII, p. 179; Trimen, Fl. Ceyl. II, p. 54; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 135; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 33; Wight, Ic. t. 292. *Hedysarum triflorum*, L.; Roxb. Fl. Ind. III, p. 353; Lour. Fl. Cochinch. II, p. 547.

蠅翼 (nom. indigen. Formos.) ex Ōwatari.

Hab. in Liukiu: insula Okinawa (Y. Tashiro), Naha (T. Itō, no. 909); in Formosa boreali: Taipe (T. Makino), Pachina (M. Ueno, no. 23, B); in Formosa australi: Hong-soang (H. Kawakami, no. 222).

Desmodium heterophyllum, DC. Prodr. II, p. 334; Baker in Hook. f. Fl. Brit. Ind. II, p. 173; Maxim. in Mel. Biol. XII, p. 445; Hemsl. in Journ. Linn. Soc. XXIII, p. 173; Trimen, Fl. Ceyl. II, p. 55; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 135; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 401; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 33. *D. caespitosum*, DC. Prodr. II, p. 333. *D. triflorum*,

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var. *majus*, Wight, Ic. t. 291. *Hedysarum reptans*, Roxb. Fl. Ind. III, p. 354.

Racemi 2-flori; pedunculi communi 5-30 mm. longi, patule pilosi; pedicelli 10-12 mm. longi, glabri. Legumina plerumque 5-6-articulata.

Hab. in Formosa boreali: Kelung (T. Makino).

Desmodium parvifolium, DC. Prodr. II, p. 334; Benth. Fl. Hongk. p. 84; Benth. Fl. Austral. II, p. 235; Baker in Hook. f. Fl. Brit. Ind. II, p. 174; Hemsl. in Journ. Linn. Soc. XXIII, p. 174; Trimen, Fl. Ceyl. II, p. 55. *D. microphyllum*, DC. Prodr. II, p. 337; Miq. Prol. p. 233; Maxim. in Mel. Biol. XII, p. 445; Franchet, Pl. David. p. 94. *E. stipulaceum*, Hassk. Pl. Jav. Rar. p. 361. *Hedysarum microphyllum*, Thunb. Fl. Jap. p. 284.

Hab. in Formosa orientali: jurisdictione Taitoo, campis Kilai legit Y. Tashiro, no. 1, A.

Abrus precatorius, L. Lour. Fl. Cochinch. II, p. 520; Roxb. Fl. Ind. III, p. 257; DC. Prodr. II, p. 381; Benth. Fl. Hongk. p. 92; Benth. Fl. Austral. II, p. 270; Baker in Hook. f. Fl. Brit. Ind. II, p. 175; Hemsl. in Journ. Linn. Soc. XXIII, p. 187; Trimen, Fl. Ceyl. II, p. 57; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 34; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34.

Keh-boo-tsoo (雞母珠) ex Ōwatari.

山重山珊瑚, 雞丹眞珠 (ex Hirase).

Hab. in Formosa australi: Tailan (S. Hirase), Pau-lyau, Fonkang, Takaw (C. Ōwatari).

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Vicia tetrasperma, Moench. Baker in Hook. f. Fl. Brit. Ind. II, p. 177; Hemsl. in Journ. Linn. Soc. XXIII, p. 185. *Ervum tetraspermum*, L.; DC. Prodr. II, p. 367.

Hab. in Liukiu: insula Okinawa tractu Haneji-majiri (Y. Tashiro).

Vicia hirsuta, Koch. Baker in Hook. f. Fl. Brit. Ind. II, p. 177; Hemsl. in Journ. Linn. Soc. XXIII, p. 184; Franchet, Pl. David. p. 99. *Ervum hirsutum*, L.; DC. Prodr. II, p. 366.

Hab. in Liukiu: insula Okinawa, tractu Hanejimajiri. (Y. Tashiro).

Vicia sativa, L. DC. Prodr. II, p. 360; Baker in Hook. f. Fl. Brit. Ind. II, p. 178; Hemsl. in Journ. Linn. Soc. XXIII, p. 185; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34.

Hab. in Liukiu: insula Okinawa, ad Shuri legit R. Teruya (Herb. Itō, no. 760), insula Ishigaki legit Y. Arayaki (Herb. Itō, no. 1367), insula Okinawa, tractu Hanejimajiri (Y. Tashiro); in Formosa australi: Pau-lyau et Fonkang (C. Ōwatari).

Vicia angustifolia, Roth. Ledeb. Fl. Ross. I, p. 666; Hemsl. in Journ. Linn. Soc. XXIII, p. 184; Franchet, Pl. David. p. 98. *V. sativa*, var. *angustifolia* Baker in Hook. f. Fl. Brit. Ind. II, p. 178.

Hab. in Formosa centrali: Gyakalong (C. Ōwatari).

Pisum sativum, L. Hemsl. Adnot. in Journ. Linn. Soc. XXIII, p. 187; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34.

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荷蘭豆 ex Henry l.c. et libro Taiwanfushi.

Hab. in Formosa boreali: in ripa fluminis Tamsui cult. (T. Makino).

Glycine tomentosa, Benth. Fl. Austral. II, p. 245; Hance in Journ. Bot. (1878), p. 105; Hemsl. in Journ. Linn. Soc. XXIII, p. 189; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34.

Hab. in Formosa boreali: Shinteck et Byolitsu legit Y. Honda (nos. 59, 118).

Glycine hispida, Maxim. in Mel. Biol. IX, p. 70; Franchet, Pl. David. p. 100; Hemsl. in Journ. Linn. Soc. XXIII. p. 188; Prain in Journ. Asiat. Soc. Beng. LXVI, p. 403; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 34. *Soja hispida,* Moench. DC. Prodr. II, p. 396. Miq. Fl. Ind. Bat. I, p. 223; Miq. Prol. p. 240; Fr. et Sav. Enum. Pl. Jap. I, p. 108. *Soja japonica,* Sieb. Syn. Pl. Oeconom. Jap. p. 56. *Glycine Soja,* Benth. in Journ. Linn. Soc. VIII, p. 266; Baker in Hook. f. Fl. Brit. Ind. II, p. 184, non Sieb. et Zucc. *Dolichos Soja,* L. Thunb. Fl. Jap. p. 282. Kaempf. Amœnit. p. 837-838 cum icone.

Hab. in Liukiu cult., inter Onnah et Nago legit T. Itō anno 1894 (no. 1060); in Formosa: ad Honsoang legit H. Kawakami anno 1895; ad Shinteck legit T. Makino anno 1896. Mense Novembri fr. mat.

Mucuna capitata, W. et Arn. Miq. Fl. Ind. Bat. I, p. 212; Miq. Prol. p. 240; Fr. et Sav. Enum. Pl. Jap. I, p. 109; Baker in Hook. f. Fl. Brit. Ind. II, p. 187; Prain in Journ.

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Asiat. Soc. Beng. LXVI, p. 409. *Carpopogon capitatum*, Roxb. Fl. Ind. III, p. 284. *Dolichos Hassjoo*, Sieb. Syn. Pl. Oeconom. Jap. p. 55. Iinuma, Soomoku-zusetsu XIII, t. 21; Iwasaki, Honzoo-zufu 43, fol. 29.

Legumina 9-10½ cm. longa, 18 mm. lata, nigrescentia griseo-subvelutina, subrecurvata longitudinaliter 3-4 costata, incurvo-apiculata, 5-6 sperma, semina 11-16 mm. longa, 6 mm. lata, albida nitida, transverse obscure venulosa; hilum oblongum, 7 mm. longum, 3 mm. latum.

Tamasai (nom. indigen. incult. Albi). ex Tashiro.

Hab. in Formosa orientali: campis Kilai dictis, cult., jurisdictionis Taitoo (Y. Tashiro).

Mucuna macrocarpa, Wall.?

Folia et legumina desunt. Caulis supp. 2-½ cm. diametro, Racemi penduli, 11 cm. longi, pubescentes, in ramis vetustioribus fasiculati; pedicelli 1½ cm. longi. Calyx 22 mm. altus. Vexillum 4 cm. longum, 5 cm. latum, margine tomentosum. Alæ 5½ cm. longæ, 2 cm. latæ, obtusæ, margine tomentosæ. Carina 6½ cm. longa, 1¼ cm. lata, lineari-oblonga, acuta. Stamina 6½ cm. longa. Ovarium sessile, lineare, pubescens, multiovulatum.

Hab. in Liukiu (H. Kuroiwa).

Mucuna sp.

Exemplum incompletum tantum prostat. Foliora terminalia elliptica vel elliptico-oblonga acuta, basi subrotundata utrinque glabra; lateralia majora oblique ovata. Flores in sicco nigri. Calyx vexillumque exempl. nos. desunt. Alæ anguste oblongæ carinis aequilongæ; carina 30 mm. longa, 6

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mm. lata, acuta subincurva brevi apiculata, basi auriculata. Stamina diadelpha.

Hab. in Liukiu : insula Ishigaki legit S. Tanaka anno 1891 ; insula Iheya (H. Kuroiwa). Mense Julio, fl.

Mucuna (Zoophthalmum, Carpogon)* **ferruginea,** Matsumura sp. nov.

Frutex volubilis. Caulis in sicco limosus, 3-6 cm. diametro ; ramuli angulati, ramulis petiolisque reflexim ferrugineo-tomentosis. Folia subcoriacea, longe petiolata, trifoliolata ; foliola terminalia elliptica vel oblongo-elliptica obtusa mucronulata, basi subrotundata, juvenilia supra parce subtus densius ferrugineo-tomentosa utrinque 5-6 costata ; lateralia oblique late ovata vel ovato-oblonga obtusiuscula, stipulis parvis ovatis acutis. Flores ignoti. Legumina linearia plano-compressa curvata, longe apiculata, torulosa, ad suturas leviter longitudinaliterque costata nec alata, intus inter semina crasse septata ; valvis crassis, lignosis costis nullis, ferrugineo-tomentosis, pilis urentibus mellis, 4-12 spermis. Semina plana, orbicularia, nigra, hilo lineari fere circumdata, crasse strophiolata.

Petioli 5-8 cm. longi. Foliola terminalia 9-11½ cm. longa, 5-7 cm. lata. Racemi fructiferi 11 cm. longi. Legumina 17-41 cm. longa, 4 cm. lata. Semina 2½ cm. diametro; hilum 6 cm. longum. Apicula leguminum 2-3 cm. longa, 2-3 septata. Stipes nullus.

Mucuna macrocarpa, Wall, affinis videtur, sed ramulis foliis legumimbusque ferrugineo-tomentosis foliolis obtusis satis differt.

Hab. in Formosa australi : ad Tsui-te-liau detexit C. Ōwatari anno 1898. Mense Januario fr. mat.

Mucuna gigantea, DC.?

Specimen absque flore fructuque prostat. Foliola terminalia

* Prain in Journ. Asiat. Soc. Bengal, LXVI (1897) p. 407.

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oblonga acuminata supra glabra subtus parce adpresso-puberula. Caulis fere glabrescens, pilis reflexis parce vestitus.

Ujilu-kanda (nom. indigen.).

Hab. in Liukiu: monte Onnaah legit T. Itō (no. 1061) anno 1894; tractu Kunchan, ins. Okinawa (ipse) anno 1897.

Erythrina indica, Lam. DC. Prodr. II, p. 412; Wight, Icon. t. 58; Roxb. Fl. Ind. III, p. 249; Miq. Fl. Ind. Bat. I, p. 207; Baker in Hook. f. Fl. Brit. Ind. II, p. 188; Benth. Fl. Austr. II, p. 253; Hemsl. in Journ. Linn. Soc. XXIII, p. 189; Trimen, Fl. Ceyl. II, p. 63; King in Journ. Asiat. Soc. Beng. LXVI, p. 70; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 35; Shitsumon-honzoo-furoku. fol. 6. sub nom. liukiu. *dehgu.*

Soan-poo-yong (山芙蓉), soang-yah-yock (樣仔藥) nom. indigen. formos. ex Kawai.

Hab. in Liukiu: circa urbem Naha (ipse); ins. Chikubu, Archipel. Yaeyama legit T. Itō (no. 1380) anno 1894; in Formosa boreali, Shinteck (T. Makino anno 1896); Tonshee-kac (S. Kawai); in Formosa australi: Honsoang (H. Kawakami, anno 1895); inter Tonkang et Paulyau (C. Ōwatari, anno 1898).

Galactia Tashiroi, Maxim. in Mel. Biol. XII, p. 446; Hemsl. in Journ. Linn. Soc. XXIII, p. 190.

Foliola 36 mm. longa, 29 mm. lata. Racemi 12½ cm. longi, ad 8-flori. Legumina 60 mm. longa, 8 mm. lata.

Taritagit (nom. indigen. Botel-Tobagoense).

Hab. in Liukiu: ins. Ishigaki legit S. Tanaka (no. 277) anno 1890; ins. Miyako legit S. Tachitsu anno 1895 (Herb. T. Itō, no. 1235); locis littoribus ad Naha legit Y. Tashiro anno

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1887 ; eodem loco legit T. Itō (no. 908) anno 1894 ; ad saxam littoris prope Onnah (ipse anno 1897) ; ins. Kumeshima (H. Kuroiwa) ; Botel Tobago legitTorie anno 1897.

Galactia formosana, Matsumura sp. nov.

Volubilis. Caulis gracilis teres adpresse puberulus, pilis brevibus reflexis. Folia petiolata, trifoliolata ; foliola terminalia elliptica vel oblongo-elliptica distantia ; lateralia parviora, obtusa emarginulata mucronulata basi subcordata, supra pilis brevibus adpresse conspersa, subtus densius pilosa, utrinque 5-nervata. Racemi axillares pauciflori (4-5), floribus plerumque geminatis. Calyx campanulatus parce puberulus punctatus, laciniis lanceolatis acutis, 2 superioribus connatis. Vexillum obovato-ellipticum basi acutum apice emarginulatum, alæ obovato-oblongæ carinis subaequilongæ, unguiculatæ, basi auriculatæ, auriculis acutis ; carina obovato-oblonga. Stamina diadelpha, subæqualia, carinis parum breviora, subdeclinata ; antheræ oblongæ ; staminum tubus calycis laciniis parum longior. Ovarium lineare, dense sericeum, brunneo-punctatum, subsessile, 8-ovulatum ; stylus ovario aequilongus, glaber, incurvatus, subcircinatus, stigmate punctiforme. Legumina linearia, plana, subfalcata, sericea.

Foliola terminalia 32 mm. longa, 18 mm. lata. Petioli 15-28 mm. longi. Racemi 1-8 cm. longi ; pedicelli 3-4 mm. longi. Flores 10 mm. longi ; calyx vix 6 mm. longus ; vexillum 11 mm. longi, 7 mm. latum ; alæ 10 mm. longæ ; carina 10 mm. longa ; stylus 13 mm. longus. Legumina 24-37 mm. longa, 5 mm. lata.

A pracedente foliorum consistentia indumentoque facile distinguenda ; ex descriptione apud Bak. in Hook. f. Fl. Brit. Ind. II, p. 192 G. tenuifloræ W. et Arn. accedere videtur, differt tamen foliolis parvioribus racemis paucioribus. An G. tenuiflora, var. villosa Bak. l.c. et huc G. tenuiflora var. Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 35 ?

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Hab. in Formosa orientali: jurisdictione Taitoo legit Y. Tashiro.

Canavalia lineata, DC. Prodr. II, p. 404; King in Journ. Asiat. Soc. Beng. LXVI. p. 63; *C. obtusifolia,* Baker in Hook. f. Fl. Brit. Ind. II, p. 196; Benth. Fl. Austr. II, p. 256; Hemsl. in Journ. Linn. Soc. XXIII, p. 192; Trimen, Fl. Ceyl. II, p. 68; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 36. *Dolichos obcordatus,* Roxb. Fl. Ind. III, p. 303. *D. lineatus,* Thunb. Fl. Jap. p. 280; Iinuma, Soomoku-zusetsu XIII, t. 20.

Racemi 23 cm. longi. Legumina 7-13 cm. longa, 2½ cm. lata.

Hab. in Liukiu: insula Obama legit T. Itō (no. 1379) anno 1894; Formosa australi: locis littoribus prope Pau-liau legerunt Y. Tashiro et C. Ōwatari annis 1897-1898; ins. Iheya (H. Kuroiwa). Mense Augusto fl., Martio fr. mat.

Canavalia obtusfolia, DC. Prodr. II, p. 404; King in Journ. Asiat. Soc. Beng. LXVI, p. 63. *C. obtusifolia,* Miq. Fl. Ind. Bat. I, p. 215, non DC. *C. turgida,* Grah.; Miq. Fl. Ind. Bat. I, p. 215; Prain in Journ. Asiat. Soc. Beng. LXVI, p. 64. *C. ensiformis,* var. *turgida,* Baker in Hook. f. Fl. Brit. Ind. II, p. 196; Hemsl. in Journ. Linn. Soc. XXIII, p. 192. *Dolichos rotundifolius,* Roxb. Fl. Ind. III, p. 302.

Planta alte volubilis. Legumina 9 cm. longa, 4½ cm. lata.

Hab. insula Ōshima, prope Nishinakama legit T. Itō (no. 675) anno 1894; insula Okinawa lege ipse anno 1897; in Formosa australi: ad pedem montis Takaw legit C. Ōwatari anno 1898;

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ad Honsoang legit H. Kawakami anno 1895. Mense Julio fl.

Canavalia sp.?

Specimen incompletum absque foliis prostat. Racemus fructifer lignosus crassus nec tumidus 22 cm. longus; pedicelli 1-2 cm. longi. Legumina linearia recta acuta turgida nec lignosa, 15½-18½ cm. longa, 23 mm. lata, subtorulosa intus continua basi in stipem longem attenuata, 4-8-sperma; stipes 2-3 cm. longus. Semina ovoidea, rubra, nitida; hilum oblongum, estrophiolatum.

Hab. in Formosa australi: inter Tonkang et Pauliau legit C. Ōwatari.

Pueraria Thunbergiana, Benth. in Journ. Linn. Soc. IX, p. 122; Miq. Prol. p. 240; Hance in Journ. Bot. (1874) p. 259, Journ. Linn. Soc. XIII, p. 102; Fr. et Sav. Enum. Pl. Jap. I, p. 109; Hemsl. in Journ. Linn. Soc. XXIII, p. 191; Prain in Journ. Asiat. Soc. Beng. LXVI, p. 419; Henry in Trans. Asiat. Soc. Jap. XXIV. Suppl. p. 35. *P. Thomsoni,* Benth. in Journ. Linn. Soc. IX, p. 122; Baker in Hook. f. Fl. Brit. Ind. II, p. 198. *Dolichos hirsutus,* Thunb. in Trans. Linn. Soc. II, p. 339; Sieb. Syn. Pl. Oeconom. p. 55. *Pachyrhizus Thunbergianus,* Sieb. et Zucc. Fl. Jap. Fam. Nat. II, p. 237. *Neustanthus chinensis,* Benth. Fl. Hongk. p. 86. Kaempf. Icon. select. Pl. t. 41 sub nomine japonico erroneo *Kadsune*; Iinuma, Soomoku-zusetsu XIII, t. 22.

Hab. in Formosa boreali: Kelung (T. Makino et C. Ōwatari, anno 1896), Shinteck (T. Makino); Formosa australi: locis montosis prope Shin-kang-tzoon legit C. Ōwatari, ad Katan-ah legit H. Kawakami anno 1895; inter Koo-choo et Shinten-kui (K. Miyake).

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Phaseolus lunatus, L. DC. Prodr. II, p. 393; Roxb. Fl. Ind. III, p. 287; Baker in Hook. f. Fl. Brit. Ind. II, p. 200; King in Journ. Asiat. Soc. Beng. LXVI, p. 48; Matsum. in Tōkyō Bot. Mag. XII, p. 61.

Legumen in specimine e Formosa 8 cm. longum, 26 mm. latum, 2-spermum, puberulum.

Nom. indigen.: Quan-jim-ten 觀音豆 ex Satake.

Hab. in Liukiu: ad Kimm insulæ Okinawa cultus (ipse); in Formosa: jurisdictione Taichoo legit Satake anno 1897, mense Octobri fl. et fr.

Phaseolus trilobus, Ait? Hort. Kew. Ed. II, Vol. IV. p. 290; Roxb. Fl. Ind. III, p. 299; Wight Icones t. 94; King in Journ. Asiat. Soc. Beng. LXVI, p. 49; Henry in Trans. Asiat. Soc. Jap. Suppl. XXIV, p. 36. *Dolichos trilobatus* L. DC. Prodr. II, p. 399.

Caulis gracilis, sursum pilis patentibus vestitus. Folia ternata; foliola variabilia, ovata acuta, subtrilobata, oblonga, utrinque acuta, vel lineari-lanceolata. Pedunculi foliis longiores; flores subcapitati; corolla flava. Legumina linearia teretia 5 cm. longa 10-sperma, glabra. Pedunculi 8 cm. longi.

Hab. in Formosa: ad Pikoh legit T. Makino anno 1896, mense Novembri fl. et fr. mat.

Phaseolus radiatus, L. var. **typica,** D. Prain in Journ. Asiat. Soc. Beng. LXVI (1897) p. 422; Matsumura in Tōkyō Bot. Mag. XII, p. 61.

Hab. in Liukiu: insula Iheya (H. Kuroiwa); in Formosa australi: ad Hengtsung legit C. Ōwatari anno 1898. Cultus.

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Phaseolus sp.

Specimen sterile tantum prostat. Caulis volubilis, foliolis ovatis late rhombeo acutis obscure albo-variegatis, stipulis ovato-lanceolatis.

Hab. inter Fung-kang et Shajoo legit C. Ōwatari anno 1898.

Vigna lutea, A. Gr.; Baker in Hook. f. Fl. Br. Ind. I, p. 205; Hemsl. in Journ. Linn. Soc. XXIII, p. 193; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 36. *V. retusa,* Walp.; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 51; *Dolichos luteus* Sw.; DC. Prodr. II, p. 398.

Hab. in Liukiu: locis maritimis ins. Okinawa legerunt Y. Tashiro et J. Matsumura annis 1887-1897, Maio fl. Augusto fr.; mat. prope Shuri (K. Miyake); in Formosa: locis maritimis ad Kelung legerunt T. Makino et C. Ōwatari anno 1896; ad pedem montis Takaw legit C. Ōwatari anno 1896. Octobri-Decembri fl.; insula Ōshima: arenosis maritimis ad Naze legit T. Itō, (no. 500.)

Var. **minor,** Matsumura, caulibus gracilioribus, foliis parvioribus, floribus paucioribus (3-7), pedunculis foliis duplo longioribus, leguminibus 35, 37, 43 mm. longis, acutis, glabris, seminibus parvioribus, ellipticis utrinque retusis, brunneis, nigris variegatis.

Hab. in Liukiu: insula Miyako legit T. Itō, (no. 1160.)

Vigna luteola, Benth. Fl. Austral. II, p. 260; Baker in Hook. f. Fl. Brit. Ind. II, p. 205; Trimen, Fl. Ceyl. II, p. 73. *Dolichos gangeticus,* Roxb. Fl. Ind. III, p. 310. *Vigna glabra* et *villosa,* Savi; DC. Prodr. II, p. 401.

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Hab. in Liukiu: insula Iheya (H. Kuroiwa); in Formosa boreali: prope Pachina legit T. Makino (forma foliis ovatis); in Formosa australi: Hong-soang (H. Kawakami, no. 84; in Formosa orientali: jurisdictione Taitoo legit Y. Tashiro (forma foliis lanceolatis).

Vigna Catiang, Endl. Baker in Hook. f. Fl. Brit. Ind. II, p. 205; G. King in Journ. Asiat. Soc. LXVI, p. 51. *Dolichos Catiang,* L; DC. Prodr. II, p. 399; Roxb. Fl. Ind. III, p. 302; Lour. Fl. Cochinch. II, p. 538.

Var. **sinensis,** King in Journ. Asiat. Soc. Beng. LXVI, p. 52; *Vigna sinensis,* Endl.; Hassk. Pl. Jap. Rar. p. 386; Hemsl. in Journ. Linn. Soc. XXIII, p. 193. *Dolichos sinensis* L; DC. Prodr. II, p. 399; Roxb. Fl. Ind. III, p. 302; Bot. Mag. t. 2232. *D. tranquebaricus* Jacq; DC. Prodr. II, p. 400.

Aka-mame (nom. indigen. Liuk.) ex T. Itō.

Hab. in Liukiu: ins. Ishigaki archipel. Yaeyama legit T. Itō (no. 1277); insula Iheya (H. Kuroiwa).

Clitoria Ternatea, L. DC. Prodr. II, p. 233; Bot. Mag. t. 1542; Roxb. Fl. Ind. III, p. 321; Baker in Hook. f. Fl. Brit. Ind. II, p. 208; Trimen, Fl. Ceyl. II, p. 75; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 56; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 35; Iinuma, Soomoku-zusetsu XIII, t. 39.

Pocca-hoi (nom. indigen.) ex Ōwatari.

Hab. in Formosa australi: monte Takaw (C. Ōwatari), prope Hong-soang (Y. Tashiro), ad Katan-ah (H. Kawakami no. 47), ad Tailan (Hirase).

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Dolichos Lablab, L. Roxb. Fl. Ind. III, 305; Bot. Mag. t. 896; Baker in Hook. f. Fl. Brit. Ind. II, p. 194; Trimen, Fl. Ceyl. II, p. 76; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 55; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 37. *Lablab vulgaris*, Savi; DC. Prodr. II, 401. *Lablab Nankinicus*, Savi; DC. Prodr. II, p. 402. *L. cultratus*, DC. Prodr. II, p. 402; Miq. Prol. p. 279. *L. leucocarpus, perennans, microcarpus*, DC. Prodr. II, p. 402. *Dolichos lignosus*, L; Roxb. Fl. Ind. III, p. 307; Bot. Mag. t. 380. *Dolichos cultratus*, Thunb. Trans. Linn. Soc. II, p. 320, Fr. et Sav. Enum. Pl. Jap. I, p. 112. *D. ensiformis*, Thunb. Fl. Jap. p. 279; *D. purpureus*, L; Lour. Fl. Cochinch. II, p. 534. *D. albus*, Lour. Fl. Cochinch. II, p. 534.

Hab. in Formosa boreali: ad Taipe legerunt Makino et Ōwatari. Cult.

Psophocarpus palustris, Desv. Baker in Hook. f. Fl. Brit. Ind. II, p. 212. *P. longepedunculatus*, Hassk. Pl. Jav. Rar. p. 388.

Walash (nom. indigen.) 荳菜 (nom. sinen.) ex Tashiro.

Perennis: adnotavit Tashiro. Legumina 11½-13 cm. longa, alis inclusis 2 cm. lata, 10-sperma.

Hab. in Formosa orientali: jurisdictione Taitoo legit Y. Tashiro. Ab indigenis pro leguminibus culta.

Atylosia scabaraeoides, Benth. Fl. Hongk. p. 90; Benth. Fl. Austral. II, p. 263; Baker in Hook. f. Fl. Brit. Ind. II, p. 215; Hemsl. in Journ. Linn. Soc. XXIII, p. 195; Trimen, Fl. Ceyl. II, p. 79; G. King in Journ. Asiat. Soc. Beng. LXVI, p.

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46; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 37. *Rhynchosia scabaraeoides*, DC. Prodr. II, p. 387; *R. biflora*, DC. Prodr. II, p. 387.

Hab. in Formosa boreali: Shinteck (T. Makino); in Formosa australi: monte Takaw (C. Ōwatari), Hong-soang (Y. Tashiro), territorio inculto Subonsha dicto legit C. Ōwatari.

Cajanus indicus, Spreng. Baker in Hook. f. Fl. Brit. Ind. II, p. 217; Benth. Fl. Hongk. p. 89; Maxim. in Mel. Biol. XII, p. 447; Bot. Mag. t. 6440; Hemsl. in Journ. Linn. Soc. XXIII, p. 195; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 47; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 37. *C. flavus*, DC. Prodr. II, p. 406. *C. bicolor*, DC. Prodr. II, p. 406. *Cytisus Cajan*, L; Roxb. Fl. Ind. III, p. 325. Iinuma, Soomoku-zusetsu XIII, t. 36; Iwasaki, Honzoo-zufu. XXII, fol. 10.

Chū-tan (ex Ōwatari).

Shū-ten (ex Satake) 樹豆 (ex Hirase).

Hab. in Liukiu: insula Okinawa, Yontanzan (ipse); in Formosa australi: Hong-soang (H. Kawakami, no. 122), Lengalyau (C. Ōwatari), Tsuiteilyau (Y. Satake), Tonsheekack (C. Ōwatari et Kawai), Tailan (S. Hirase).

Rhynchosia minima, DC. Prodr. II, p. 385; Baker in Hook. f. Fl. Brit. Ind. II, p. 223; Maxim. in Mel. Biol. XII, p. 447; Hemsl. in Journ. Linn. Soc. XXIII, p. 196, Trimen, Fl. Ceyl. II, p. 84; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 37. *R. medicaginea*, DC. Prodr. II, p. 386. *R. rhombifolia*, DC. Prodr. II, p. 386. *R. nuda*, DC. Prodr. II, p. 385. *R. ervoidea*, DC. Prodr. II, p. 386.

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Mizukiyamu (nom. indigen Miyakense) ex Itō.

Hab. in Liukiu : locis maritimis prope Naha (Y. Tashiro) et T. Itō, (no. 906) ; ins. Erabu prope Miyako (idem, no. 1213, 1214, 1236) ; Kurushima, Archipel. Yaeyama (idem, no. 1383) ; ins. Takidun Archipel. Yaeyama (T. Itō, no. 1382) ; Kunchan (H. Kuroiwa) ; in Formosa australi : ad pedem montis Takaw legit C. Ōwatari, mense Februario fr. mat.

Rhynchosia volubilis, Lour. Fl. Cochinch. II, p. 562 ; DC. Prodr. II, p. 385 ; Benth. Fl. Hongk. p. 90 ; Miq. Prol. p. 241 ; Fr. et Sav. Enum. Pl. Jap. I, p. 112 ; Maxim. in Mel. Biol. IX, p. 70 ; Hemsl. in Journ. Linn. Soc. XXIII, p. 196 ; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 37. Iinuma, Soomoku-zusetsu XIII, t. 28 et 29.

Hab. in Ōshima : inter Naze et Yamatobama et prope Taken legit T. Itō, (no. 559, 607), Mense Julio fr. mat.; in Formosa boreali : Byolitsu (Y. Honda, no. 58), Shalyotoo, Shizangan (T. Makino).

Flemingia strobilifera, R. Br. DC. Prodr. II, p. 351 ; Wight, Ic. t. 267 ; Baker in Hook. f. Fl. Brit. Ind. II, p. 227 ; Trimen, Fl. Ceyl. II, p. 86 ; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 42 ; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 437 ; Henry in Trans. Asiat, Soc. Jap. XXIV, Suppl. p. 37.

Hab. in Formosa australi : Tailau, Takaw, Hong-soang (H. Kawakami, no. 125 ; Y. Tashiro, no. 10 ; C. Ōwatari) Sankwaishack (C. Ōwatari).

Flemingia stricta, Roxb. Fl. Ind. III, p. 228 ; DC.

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Prodr. II, p. 351; Wight, Ic. t. 329; Baker in Hook. f. Fl. Brit. Ind. II, p. 228; Hemsl. in Journ. Linn. Soc. XXIII, p. 197.

Var. **pteropus,** Baker l.c.

Hab. in Formosa: ad Tonsheekack jurisdictionis Taichu legit C. Ōwatari anno 1896. Mense Januario fr. mat.

Flemingia congesta, Roxb. Fl. Ind. III, p. 340; DC. Prodr. II, p. 351; Wight, Ic. t. 390; Baker in Hook. f. Fl. Brit. Ind. II, p. 228; Hemsl. in Journ. Linn. Soc. XXIII, p. 197; Trimen, Fl. Ceyl. II, p. 87; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 43; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. pp. 37.

Var. **nana,** Baker, l.c. p. 229. *F. nana,* Roxb. Fl. Ind. III, p. 339; Wight, Ic. t. 389. D. Prain in Journ. Asiat. Soc. Beng. LXVI, pp. 439 et 441.

Hab. in Formosa boreali: Shinteck (T. Makino); in Formosa australi: Hong-soang (H. Kawakami, no. 247, 214.)

Pterocarpus indicus, Willd ?

Specimina plura absque flore et fructu prostant. Ramuli nigricantes, micantes glabri. Folia 13-38 cm. longa; foliola 7-11, alternata, late ovata vel rotundata, elliptica basi rotundata rarius cuneata, apice abrupte acuminata utrinque glabra, subtus nervosa, reticulata; lamina 4½-13 cm. longa, 3-7½ cm. lata. Legumen subrotundatum reticulatum, 2½ cm. diametro: adnotavit Y. Tashiro.

Hab. in Liukiu: locis sylvaticis insulæ Yaeyama legit Y. Tashiro anno 1887.

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Pongamia glabra, Vent. DC. Prodr. II, p. 416; Wight, Ic. t. 59; Bedd. Fl. Sylv. t. 177; Baker in Hook. f. Fl. Brit. Ind. II, p. 240; Benth. Fl. Austral. II, p. 273; Benth. in Journ. Linn. Soc. IV, Suppl. p. 115; Benth. Fl. Hongk. p. 94; Hemsl. in Journ. Linn. Soc. XXIII, p. 200; Trimen, Fl. Ceyl. II, p. 91; var. typica, G. King in Journ. Asiat. Soc. Beng. LXVI, p. 95; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 456; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 38. *Galedupa indica,* Lam; Roxb. Fl. Ind. III, p. 239.

Kuroyona (nom. indigen. Ōshima.) ex Tashiro.

Hab. in Liukiu: locis maritimis tractus Kunchan, ins. Okinawa (Y. Tashiro), prope Oura (S. Tanaka, no. 213, 125), ad Shuri (ipse); in Formosa boreali: locis maritimis prope Kelung (T. Makino et C. Ōwatari); in Formosa australi: prope Pau-lyau et Fung-kang (C. Ōwatari).

Derris uliginosa, Benth. in Journ. Linn. Soc. IV, Suppl. p. 107; Benth. Fl. Hongk. p. 94; Baker in Hook. f. Fl. Brit. Ind. II, p. 241; Trimen, Fl. Ceyl. II, p. 92; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 102; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 38. *D. trifoliata,* Lour. Fl. Cochinch. II, p. 526. *Pongamia uliginosa,* DC. Prodr. II, p. 416. *Galedupa uliginosa,* Roxb. Fl. Ind. III, p. 243. *Dalbergia heterophylla,* Willd.; DC. Prodr. II, p. 417.

Flores paniculati; paniculæ 3, 4, 7, 12 cm. longæ. Foliola 3-7. Bractæ minutæ ovatæ, obtusiusculæ, ciliolatæ. Calyx subcampanulatus, retusus glabrus, margine ciliolatus vix 4 mm. altus; bracteolæ ad basin calycis 2, bracteis similes, minutæ. Corolla alba (ex Itō); vexillum reflexum, ovale, apice emarginatum, unguiculatum, basi non callosum; alæ oblongæ, obtusæ

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longius unguiculatæ, vix 10 mm. longæ; carinæ obtusæ, alis latiores, 11 mm. longæ. Stamen vexillare ad basin liberum. Ovarium sessile, lineare, in stylum attenuatum, pilosulum, 6-spermum; stylus glaber, incurvus, stigmate terminale punctiforme.

Kee-kadzura (nom. indigen. ins. Yaeyama) ex Tashiro.

Hab. in Liukiu: ins. Okinawa tractus Kushimajiri (Y. Tashiro), (ipse), ins. Iriomote, ad pugum Hoshidate legit T. Itō (no. 1418); insula Iheya (H. Kuroiwa); in Formosa australi: ad pedem montis Takaw, et ad Hai-soa prope Takaw legit C. Ōwatari.

Derris laxiflora, Benth. in Journ. Linn. Soc. IV, Suppl. p. 105; Hemsl. in Journ. Linn. Soc. XXIII, p. 199; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 37.

Hab. in Formosa boreali: ad Hau-hyac-soan prope Kelung legerunt T. Makino et C. Ōwatari.

Derris chinensis, Benth. in Journ. Linn. Soc. IV, Suppl. p. 104; Benth. Fl. Hongk. p. 94; Hemsl. in Journ. Linn. Soc. XXIII, p. 199.

Hiitien 魚藤 (nom. indigen.) ex Ōwatari.

Hab. in Formosa boreali-occidentali: Tonsheekac (C. Ōwatari); (S. Yokoyama, no. 27); in Formosa australi-occidentali: jurisdictione Kagi legit Y. Tashiro.

Radices ab indigenis an pisces venenandos adhibentur.

Euchresta Horsfieldii, Bennett. Benth. in Journ. Linn. Soc. IV, Suppl. p. 118; Baker in Hook. f. Fl. Brit. Ind. II, p. 248; Maxim. in Mel. Biol. XII, p. 448; Hemsl. in Journ. Linn. Soc. XXIII, p. 200; Henry in Trans. Asiat. Soc. Jap.

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XXIV, Suppl. p. 38. *Andira Horsfieldii*, Lesch. DC. Prodr. II, p. 476.

Hab. in Liukiu: insula Okinawa, monte Ohichadake Tashiro in lit.); in Formosa centrali: prope Taitsuikutsu legit Dr. Honda (no. 120).

Planta foetida: adnotavit Dr. Honda. Legumina 2 cm. longa, 13 mm. lata, nigro-purpreo, nitida.

Sophora tomentosa, L. Roxb. Fl. Ind. II, p. 316; DC. Prodr. II, p. 95; Baker in Hook. f. Fl. Brit. Ind. II, p. 249; Benth. Fl. Austral. II, p. 274; Hemsl. in Journ. Linn. Soc. XXIII, p. 203; Trimen, Fl. Ceyl. II, p. 95; G. King in Journ. Asiat. Soc. Beng. LXVI, p. 146; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 38.

Hab. in Liukiu: insula Sesoko (Y. Tashiro), insula Yaeyama (Y. Tashiro), insula Takidun, insula Soto-banari (T. Itō, no. 1385, 1484).

Sophora flavescens, Ait. Willd. Sp. Pl. II, p. 499; DC. Prodr. II, p. 96; Franchet, Pl. David. p. 100; Hemsl. in Journ. Linn. Soc. XXIII, p. 202. *S. angustifolia*, Sieb. et Zucc. in Abhand. Ak. Wiss. IV, p. 118; Miq. Prol. p. 241; Fr. et Sav. Enum. Pl. Jap. I, p. 113.

Hab. in Formosa centrali: in campis prope Polisha legit Y. Tashiro (no. 11). Mense Martio floret.

Cladrastis Tashiroi, Yatabe in Tōkyō Bot. Mag. (1892) VI, p. 345, t. 10.

Folia 11-15. Legumina 18, 38, 40 mm. longa, 8-15 mm. lata, adpresse pilosula.

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Hab. in Ōshima (Yamada, Y. Tashiro, S. Tanaka); Nishi Nakama, Naze (T. Itō, no. 560; 721); insula Okinawa (ipse); insula Iheya (H. Kuroiwa).

Caesalpinia Bonducella, Fleming. Roxb. Fl. Ind. II, p. 357; Baker in Hook. f. Fl. Brit. Ind. II, p. 254; Maxim. in Mel. Biol. XII, p. 448; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 38. *Guilandina Bonducella,* L. Benth. Fl. Hongk. p. 96; Benth. Fl. Austral. II, p. 276; Lour. Fl. Cochinch. I, p. 325. *Guilandia Bonduc,* L. *var. minus,* DC. Prodr. II, p. 480.

答肉刺 (nom. indigen) ex Hirase.

Bigi-sarakaki (nom. indigen. Yaeyama) ex Itō.

Hab. in Liukiu: monte Suriyama, ins. Ishigaki legit Y. Aragatchi (Herb. T. Itō, no. 1348); insula Kumeshima (H. Kuroiwa); Formosa australi: Tailan (S. Hirase), Hong-soang (H. Kawakami. no. 199), prope Lengalyau (C. Ōwatari).

Legumina 4½-6½ cm. longa, 32-38 mm. lata.

Caesalpinia Bonduc, Roxb. Baker in Hook. f. Fl. Brit. Ind. II, p. 255; Trimen, Fl. Ceyl. II, p. 98. *Guilandina Bonduc,* L. DC. Prodr. II, p. 480.

Hab. in Formosa centrali: Linkipo, Unlin (C. Ōwatari).

Racemi robusti, crassi. Legumina 11 cm. longa, 4-4½ cm. lata, longe apiculata, apiculis 15 mm. longis, 4-sperma. Semina ellipsoidea, nigro-purpurea, 17 mm. longa, 10 mm. lata.

Caesalpinia Nuga, Ait. DC. Prodr. II, p. 481; Benth. Fl. Hongk. p. 97; Benth. Fl. Austral. II, p. 277; Baker in Hook. f. Fl. Brit. Ind. II, p. 255; Engler, Bot. Jahrb. VI, p. 64; Maxim. in Mel. Biol. XII, p. 449; Hemsl. in Journ. Linn.

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Soc. XXIII, p. 206; Trimen, Fl. Ceyl. II, p. 99; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 470; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 38. *C. paniculata*, Desf. Roxb. Fl. Ind. II, p. 364; DC. Prodr. II, 481; Wight, Ic. t. 36. *C. scandens*, Koenig; DC. Prodr. II, p. 482. *C. chinensis*, Roxb. Fl. Ind. II, p. 361; Hook. et Arn. Bot. Beech. Voy. p. 182.

Hab. in Liukiu: insula Iriomote, Yaeyama (S. Tanaka, no. 336), prope Onnah (S. Tanaka, no. 80 et J. Matsumura); in Formosa australi: Lengalyau, Pau-lyau, Funkang (C. Ōwatari), in Formosa boreali: Kelung, Shizangan (T. Makino).

Caesalpinia pulcherrima, Sw. Baker in Hook. f. Fl. Brit. Ind. II, p. 215; Maxim. in Mel. Biol. XII, p. 448; Engler, Bot. Jahrb. VI, p. 64; Hemsl. in Journ. Linn Soc. XXIII, p. 206; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 38. *Poinciana pulcherrima*, L.; Bot. Mag. t. 995; Roxb. Fl. Ind. II, p. 355; Lour. Fl. Cochinch. I, p. 319; DC. Prodr. II, p. 484.

Boiyah-hui (nom. indigen. Formos.) ex Ōwatari.

蛺蝶花 *bo-ya-hui* (nom. indigen. Formos.) ex Dr. Honda.

Hab. in Liukiu: insula Okinawa, Naha cult. (ipse); in Formosa australi: Hong-soang (C. Ōwatari), Amping (Dr. Honda).

Gleditscha sp.

Hab. in Formosa australi: ad Tenkachilai-sha legit C. Ōwatari.

Cassia occidentalis, L. DC. Prodr. II, p. 497; Benth. Fl. Hongk. p. 98; Baker in Hook. f. Fl. Brit. Ind. II, p. 262; Hemsl. in Journ. Linn. Soc. XXIII, p. 211; Trimen, Fl. Ceyl.

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II, p. 105; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 38. *Senna occidentalis*, Roxb. Fl. Ind. II, p. 343.

羊角豆 (nom. indigen. Formos.) ex Hirase.

Hab. in Liukiu: ins. Okinawa, inter Nago et Onnah legit T. Itō (no. 1062) cult?; in Formosa boreali: Taipe cult. (C. Ōwatari), Tamsui (T. Makino), Shinteck (Hiraoka); Formosa australi: Lengalyau, Hengtsung (C. Ōwatari), Tailan (S. Hirase).

Cassia Tora, L.; DC. Prodr. II, p. 493; Benth. Fl. Hongk. p. 98; Baker in Hook. f. Fl. Brit. Ind. II, p. 263; Hemsl. in Journ. Linn. Soc. XXIII, p. 211; Trimen, Fl. Ceyl. II, p. 106; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 475; Henry in Trans. Asiat. Soc. XXIV, Suppl. p. 38. *C. obtusifolia*, L.; Lour. Fl. Cochinch. I, p. 323. *Senna Tora et toroides*, Roxb. Fl. Ind. II, p. 340.

Hab. in Liukiu: Shuri (K. Miyake); in Formosa boreali: Taipe (T. Makino), Tachina (T. Makino), (T. Niinami et M. Ueno, no. 3, B.).

Cassia glauca, Lam.; DC. Prodr. II, 495; Bedd. Fl. Sylv. p. 91; Baker in Hook. f. Fl. Brit. Ind. II, p. 265; Hemsl. in Journ. Linn. Soc. XXIII, p. 210. *Senna arborescens*, Roxb. Fl. Ind. II, p. 345.

Hab. in Formosa orientali-australi: locis sylvaticis prope Taimali tractus Pinang legit Y. Tashiro anno 1896. Mense Octobri fr. mat.

Var. **suffruticosa,** Baker in Hook. f. Fl. Brit. Ind. II, p. 265; DC. Prodr. II, p. 496; Benth. Fl. Austral. II, p. 285; Maxim. in Mel. Biol. XII, p. 455. *Senna speciosa*, Roxb. Fl. Ind. II, p. 347.

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Hab. in Liukiu : Insula Ishigaki, Yaeyama cult. (S. Tanaka, no. 278) ; in Formosa boreali : Shinteck (S. Hiraoka).

Cassia mimosoides, L. DC. Prodr. II, p. 505 ; Baker in Hook. f. Fl. Brit. Ind. II. p. 266 ; Benth. Fl. Hongk. p. 98 ; Benth. Fl. Austral. II, p. 291 ; Hemsl. in Journ. Linn. Soc. XXIII, p. 210 ; Trimen, Fl. Ceyl. II, p. 110 ; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 38 ; D. Prain in Journ. Asiat. Soc. Beng. LXVI, p. 477.

Hab. in Liukiu : insula Kumeshima (H. Kuroiwa) ; in Formosa boreali : Shinteck (T. Makino).

Bauhinia retusa, Ham.?

Racemi deflorati 14 mm. longi.

Punkii-tieng (nom. indigen.) ex Ōwatari.

Hab. in Formosa boreali : Katooshoo prope Byolitsu (C. Ōwatari) ; in Formosa centrali : Chope-long (C. Ōwatari).

Bauhinia sp.

Hab. in Formosa australi : Subonsha (C. Ōwatari) ; Formosa boreali-centrali : Tsuiboh-liu (C. Ōwatari).

Bauhinia japonica, Maxim. in Mel. Biol. IX, p. 75.

Racemi 10-11 cm. longi, 4-6 cm. lati. Pedicelli fl. 15-20 mm. longi. Flores 2 cm. diametro, viridescentes, in sicco nigrescentes. Calycis tomentosis lobi triangulares vel ovati, acuti. Petala reflexa, extus tomentosa. Stamina sub anthesin incurva, demum deflexa. Stylus sub initio recurvus, post authesin incurvus, stigmate terminale. Ovarium oblongum, in stylum acuminatum terminatum, albo vel fulvo-tomentosum, 3-ovulatum. Legumina rhomboidalia, plana, fulvo-tomentosum, 35-38 mm. longa, 22 mm. lata., 1-sperma.

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Racemi fructiferi 30 cm. longi; pedicelli 2 cm. longi.

Galan-kaza (nom. indigen.) ex Itō.

Hab. in Liukiu: Insula Yaeyama (Y. Tashiro), ad pagum Hoshidate ins. Iriomote legit T. Itō, no. 1419; insula Okinawa (Y. Tashiro, H. Nakagawa), ad Naha, ejusdem insulæ (ipse); insula Iheya (H. Kuroiwa).

Lysidice rhodostegia, Hance in Journ. Bot. (1867) p. p. 299, (1873) p. 207, (1883) p. 298; Hook. Ic. Pl. XII, p. 80, t. 1192; Hemsl. in Journ. Linn. Soc. XXIII, p. 213.

Hab. in Formosa boreali: Kelung cult. (T. Makino).

Erythrophloeum Fordii, Oliv. in Hook. Ic. Pl. XV, p. 7, t. 1409; Hemsl. in Journ. Linn. Soc. XXIII, p. 214.

Folia superiora pari-bipinnata; pinnæ 2-3 jugæ, oppositæ; foliola 6-9, alternata, distincte petiolulata, oblique ovata vel oblonga, apiculata, in sicco plerumque nigrescentia, supra nitida subtus glabra, reticulata. Legumen coriaceum, circinatim recurvum, oblongo-lineare, plano-compressum, obtuse apiculatum, intus continuum, rubrum, 7 spermum, valvis dehiscentibus; semina plano-ellipsoidea, purpureo-nigra, glauca, funiculis filiformibus rubris.

Pedicelli fructiferi 12 mm. longi. Legumen 9 cm. longum, 2 cm. latum. Semina 1 cm. longa, 8 mm. lata. Funiculus 1 cm. longus. Folia 30 cm. longa; foliola 3-9 cm. longa, 1½-3 cm. lata.

Taitenhon 大疔癀, 斗登風 (nom. indigen. Formos.) ex Ōwatari.

孤坟柴 (nom. indigen. sinense) ex Moroto.

Hab. in Formosa boreali: Kelung et Tamsui (T. Makino); in Formosa australi: Tsuiteilyau et Tsuisha (C. Ōwatari); in China: Fokien (H. Moroto).

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Entada scandens, Benth. Fl. Austral. II, p. 297; Baker in Hook. f. Fl. Brit. Ind. II, p. 287; Hemsl. in Journ. Linn. Soc. XXIII, p. 214; Trimen, Fl. Ceyl. II, p. 119; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 38. *E. Gigalobium*, DC. Prodr. II, p. 424. *E. Pursaetha*, DC. l.c. *E. monostachya*, DC. l.c. *E. Adenanthera*, DC. l.c. *Mimosa scandens*, Roxb. Fl. Ind. II, p. 554.

Folia saepissime cirrhis terminata, stipulata, stipulis minutis, glanduliformibus; foliola 2-3-juga, obliqua, apice emarginata, brevissime petiolulata; foliorum rachides 4-6½ cm. longæ. Flores suaveolentes (ex Itō), 7 mm. diametro, in sicco nigrescentes, spicati. Spicarum rachides 10-25 cm. longæ, striati, puberuli, lepidoti, furfuracei, bracteis minutis subulatis ciliolatis. Calyx plane cupularis, obscure 5-denticulatus, intus glaber, extus subfurfuraceus. Petala 5, libera, oblonga acuta, subcarnosa, uninervata, aestivatione valvata. Stamina 10, libera, longe exserta, 7 mm. longa; filamenta clavellata; antheræ uniformes, ovales, glabræ, glandula rubra coronatæ. Ovarium oblongum, glabrum, brevissime stipitatum; stylus terminalis, filiformis, 4-5 mm. longus, stigmate punctiforme retuso. Legumina 6½ cm. lata. Semina 3½ cm. longa, 3 cm. lata, brunnea, nitida.

Subagahnih (nom. indigen.) ex Itō.

Hab. in Liukiu: insula Yaeyama legerunt Y. Tashiro et Kuroiwa; ins. Ishigaki, monte Suri legit T. Itō (no. 1280, 1349) anno 1895.

Leucaena glauca, Benth. Fl. Hongk. p. 100; Baker in Hook. f. Fl. Brit. Ind. II, p. 290; Hemsl. in Journ. Linn. Soc. XXIII, p. 215. *Acacia frondosa*, Willd.; DC. Prodr. II, p. 468. *A. glauca*, Willd.; DC. Prodr. II, p. 467. *A. biceps*,

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Willd.; DC. Prodr. II, p. 467. *A. leucocephala*, Link. DC. Prodr. II, p. 467.

Hab. in Formosa boreali: Tamsui (T. Makino).

Acacia Richii, A. Gr.; B. Seem. Fl. Viti. p. 73; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 39.

Sun-shi-chu 相思樹 (nom. indigen.) ex Satake.

Hab. in Formosa boreali: Kelung (C. Ōwatari), Shalyootoo (T. Makino), Shinteck (T. Makino, S. Hiraoka); in Formosa australi: Kachilai (S. Kawai).

Acacia Farnesiana, Willd.; DC. Prodr. II, p. 461; Benth. Fl. Hongk. p. 101; Benth. Fl. Austral. II, p. 419; Baker in Hook. f. Fl. Brit. Ind. II, p. 292; Hemsl. in Journ. Linn. Soc. XXIII, p. 215; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 39; Bedd. Fl. Sylv. t. 52. *Mimosa Farnesiana*, L.; Roxb. Fl. Ind. II, p. 557; *Vachellia Farnesiana*, W. et A.; Wight, Ic. t. 300. *Acacia indica*, Desv.; DC. Prodr. II, p. 462.

刺花花 (nom. indigen. Formos.) ex Hirase.

Hab. in Formosa australi: ad pedem montis Takaw; Yamtyapo; Shūshūkai (C. Ōwatari); Katan-ah (H. Kawakami, no. 240, 464); Tailan (S. Hirase); in Liukiu (ex Shitsumon-honzo furoku fol. 15, sub nomine *Kingōkan*).

Acacia concinna, DC. Prodr. II, p. 464; Benth. Fl. Hongk. p. 101; Baker in Hook. f. Fl. Brit. Ind. II, p. 296; Hemsl. in Journ. Linn. Soc. XXIII, p. 215; Matsumura in Tōkyō Bot. Mag. XI, p. 78. *Mimosa concinna*, Willd.; Roxb.

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Fl. Ind. II, p. 565. *M. rugata*, Lam.; DC. Prodr. II, p. 431. *M. obsterges*, Roxb.; DC. Prodr. II, p. 431.

Ninnimbah, Muru-muru-ha (Nom. indigen.) ex Miyake.

Hab. in Liukiu: insula Okinawa, ad Shuri (ipse), (K. Miyake).

Acacia pennata, Willd.?

Hab. in Formosa centrali: prope Taisuikutsu (Dr. Honda, no. 74); Hakuyōlei (C. Ōwatari).

Pithecolobium dulce, Benth.; Baker in Hook. f. Fl. Brit. Ind. II, p. 302; Henry in Trans. Asiat. Soc. Jap. XXIV, Suppl. p. 40.

羊公豆 (nom. indigen. Formos.) ex Dre. Honda.

Hab. in Formosa australi: Tailan (Dr. Honda).

ROSACEÆ.

Prunus, L.

* **P. persica,** Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 122; A. Gray, Pl. Jap. in Perry, Exped. p. 310; Hook. f. Fl. Brit. Ind. II, p. 313; Brandis, For. Fl. Ind. p. 191; Maxim. in Mél. Biol. XI (1883) p. 666; Forbes et Hemsl. Ind. Fl. Sin. I, p. 220; Henry, List Pl. Formos. p. 40.

Amygdalus persica, L. Sp. Pl. ed. 1, p. 472; Thunb. Fl. Jap. p. 199; Roxb. Fl. Ind. II, p. 500; Bunge, Enum. Pl. Chin. Bor. p. 22; Alph. DC. Orig. Pl. Cult. p. 176;

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Miq. Prol. p. 25; Franch. et Sav. Enum. Pl. Jap. I, p. 119.

Var. vulgaris, Maxim. in Mél. Biol. XI (1883) p. 668.

Persica vulgaris, Mill. "Dict. n. 1"; DC. Prodr. II, p. 531.

P. platycarpa, Decne. Jard. Fruit.

INSULA UTCHINÂ, cult. ex *Tashiro* in litt.

ARCHIPELAGO YÊMA, cult. ex *Tashiro* in litt.

DISTRIB. Cultivated in Japan, Formosa, Corea, China and India; a wild form (*var. Davidiana,* Maxim.) is common, according to Maximowicz, on the mountains near Pekin as well as cultivated in the provinces of Schensi and Kansu.

* **P. Mume,** Sieb. et Zucc. Fl. Jap. I, p. 29, t. 11, et Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 122; Miq. Prol. Fl. Jap. p. 22; Franch. et Sav. Enum. Pl. Jap. I, p. 117; Maxim. in Mél. Biol. XI (1883) p. 671.

Amygdalis nana, Thunb. Fl. Jap. p. 199 (non L.).

Armeniaca Mume, Sieb. Syn. Pl. Oecon. n. 367.

INSULA UTCHINÂ, cult. ex *Tashiro.*

INSULA AMAMI-ŌSHIMA, cult. ex *Tashiro.*

DISTRIB. Cultivated in Japan.

* **P. Pseudo-Cerasus,** Lindl. in "Trans. Hort. Soc. Lond. VI, p. 30"; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 123; A. Gray, Pl. Jap. in Perry, Exped. p. 310, et Bot. Jap. in Mem. Am. Akad.

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n. s. VI (1859) p. 386; Fr. Schmidt, Reis. in Amurl. p. 124 (var.); Franch. et Sav. Enum. Pl. Jap. I, p. 117; Baker et S. Moore, in Journ. Linn. Soc. XVI, p. 381; Maxim. in Mél. Biol. XI (1883) p. 695 (varietates); Forbes et Hemsl. Ind. Fl. Sin. I, p. 221; Shitsumon Honzō, Gwaihen, IV, t. 23.

P. Cerasus, Thunb. Fl. Jap. p. 201 et p. 370, et Pl. Obsc. n. 104 (non L.).

P. paniculata, Ker, "Bot. Regist. t. 800" (non Thunb).

P. Puddum, Miq. Prol. Fl. Jap. pp. 22 et 303 (non Roxb. ex Wall.).

INSULA AMAMI-ŌSHIMA, cult. ex *Tashiro* in litt.

NOM. LUTCH.: Sakura (Ō.) ex *Tashiro* in litt.

DISTRIB. Mandshuria, Sachalin, Japan and China.

* **P. campanulata,** Maxim. in Mél. Biol. XI (1883) p. 698; Forbes et Hemsl. Ind. Fl. Sin. I, p. 218.

INSULA AMAMI-ŌSHIMA: "ad Naha?" [=Nazé?] (leg. *Albert Wagner*! 28 Jan. 1896, flor., comm. *Prof. Miyoshi*).

INSULA UTCHINÂ: ad Yuntanza (*Matsumura*! 1897, steril).

NOM. LUTCH.: Sakura (O.).

INSULA KUMI, culta (*S. Tanaka*! n. 238, 4 Junio 1891, steril.).

ARCHIPELAGO YÊMA, cult. ex *Tashiro*.

DISTRIB. China; cultivated in Japan.

P. spinulosa, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 122; Miq. Prol. Fl. Jap. p. 23; Franch. et Sav. Enum. Pl. Jap. I, p. 118; Maxim. in Mél. Biol. XI (1883) p. 709.

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INSULA AMAMI-ŌSHIMA: in montibus (*Tashiro*! Sept. 1887, steril.).

INSULA UTCHINÂ (*Matsumura*! 1897, steril.).

NOM. LUTCH.: Yama Tchibatchi (U.).

DISTRIB. Japan.

P. macrophylla, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 122; Miq. Prol. Fl. Jap. p. 23; Franch. et Sav. Enum. Pl. Jap. I, p. 118, II, p. 329; Maxim. in Mél. Biol. XI (1883) p. 710; Forbes et Hemsl. Ind. Fl. Sin. I, p. 219.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsley*).

INSULA UTCHINÂ: in montibus (*Tashiro*! April. 1887, steril.).

DISTRIB. Japan and China.

Rhodotypus, Sieb. et Zucc.

* **R. kerrioides,** Sieb. et Zucc. Fl. Jap. I, p. 185, t. 99; Miq. Prol. Fl. Jap. p. 221; Franch. et Sav. Enum. Pl. Jap. I, p. 122; Regel, Gartenfl. t. 505; Bot. Mag. t. 5805; Maxim. in Act. Hort. Petrop. VI, p. 244; Hance, in Journ. Bot. 1878, t. 10; Forbes et Hemsl. Ind. Fl. Sin. I, p. 229; Shitsumon Honzō, Gwaihen, IV, t. 9.

LÛTCHÛ, ex Shitsumon Honzō, l.c. An spontanea?

DISTRIB. Japan and China.

Rubus, L.

R. Sieboldi, Blume, Bijdr. p. 1110; Miq. Prol. Fl. Jap.

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pp. 224 et 372; Maxim. in Mél. Biol. VIII (1872) p. 377; Franch. et Sav. Enum. Pl. Jap. I, p. 123; Forbes et Hemsl. Ind. Fl. Sin. I, p. 237.

INSULA AMAMI-ŌSHIMA (*Carpenter* e *Forbes* et *Hemsl.*, *Tashiro*! Aug. 1887, steril.): ad Nazé (*Yamada*! 1882, steril.). "In insulis meridionalibus U-sima [Ōshima] et Yakuno-sima, ad collium latera (fl. frf. *Wright* s. n. R. bracteosi, A. Gray, n. sp.)," sec. *Maxim.*

INSULA UTCHINÂ (*Tashiro*! Majo 1887, fl.): inter Nâfa et Tchatan (*T. Itō*, n. 956, 21 Aug. 1894, steril.); ad Unna (*Matsumura*! 25 April. 1897, fl.).

ARCHIPELAGO YÊMA (*Tashiro*! Aug. 1887, steril.).

DISTRIB. Japan.

R. reflexus, Ker, "Bot, Reg. t. 461"; DC. Prodr. II, p. 566; Hook. et Arn. Bot. Beech. Voy. p. 184; Benth. Fl. Hongk. p. 104; Seemann, Bot. Voy. 'Herald,' p. 376; Maxim. in Mél. Biol. VIII (1872) p. 378; "O. Kuntze, Methodik, p. 53"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 236.

LÛTCHÛ (ex *Bentham*, l.c.).

INSULA UTCHINÂ: in monte Katuu-daki in Mutubu-madjiri (*Tashiro*! Martio 1887, fl.), in monte Genka in Hanidji-madjiri (*Tashiro*! April. 1887, fl.).

DISTRIB. China, Hongkong.

Tashiro's specimens seem to agree pretty well with Bentham's descriptions (Fl. Hongk. p. 104). Young branches densely clothed with brownish wool, almost concealing the minute prickles. Leaves simple, ovate-cordate, 4-7 cm. long., 4-6 cm. wide, 3- or 5-lobed, sometimes unlobed, the middle lobe longer than the others, covered on the upper side with brownish wool when

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young, but soon become glabrous, densely tomentose beneath, with a few short prickles on the midrib, apex acute or obtuse; petiole 2-3 cm. long, also clothed with brownish wool. Inflorescense terminal on new branches, reflexed or arcuate, shorter than the leaves. Flowers 5-7, crowded together in short branches, each 2 cm. in diam.; peduncles about ½ cm. long, highly tomentose. Bracts 1 cm. or more long, ½-1 cm. wide, deeply divided into narrow lobes. Calyx-lobes subtruncate 5-7 mm. long, densely tomentose. Petals much larger than the calyx-lobes. Filaments glabrous. Carpels numerous.

R. sp.

Insula Utchinâ: in monte Katuu-daki in Mutubu-madjiri (*Tashiro*! Martio 1887, fl., s. nom. jap. Okinawa Uradjiro Itsigo, pro part.).

Allied to the above, but differs by the following characters:

Branches erect (?), more slender, thinly tomentose and less prickly. Leaves ovate-oblong or ovate, 6-10 cm. long, 3-6 ½ cm. wide, glabrous on both sides, or sparsely clothed with brownish wool beneath, apex acuminate or sometimes obtuse; petiole 1-1½ cm. long. Inflorescence erect, exceeding the leaves. Flowers about 5-6, each on a long peduncle, which is 2-3 cm. long, densely clothed with brownish wool. Bract none.

There are some specimens from Formosa, collected by Makino, very closely related to the Luchuan plant, especially by the form of leaves, but different in being thickly clothed with brownish wool on the under side.

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R. Grayanus, Maxim. in Mél. Biol. VIII (1872) p. 382; Forbes et Hemsl. Ind. Fl. Sin. I, p. 231.

LÛTCHÛ: "insula Katona-sima [=Tokuno-shima?] (No. 79, *Wright,* defl.) et, boream versus, in ins. Yakuno-sima, in collium lateribus (*Wright,* fine Aprilis frf., comm. s. n. R. incisi var. integrifoliæ)," e *Maximowicz.*

INSULA AMAMI-ŌSHIMA (*Tashiro*! April. 1887, fl. et frf.).

INSULA UTCHINÂ (*Tashiro*! Majo 1887, fl., *Matsumura*! 1897, frf.).

ARCHIPELAGO YÈMA (*Tashiro*! Julio 1887, frf.).

Petals white, ovate, and obtuse.

R. rosæfolius, Smith, "Ic. Ined. III, p. 60, t. 60"; Ser. in DC. Prodr. II, p. 556; Hook. Ic. Pl. t. 349; Roxb. Fl. Ind. II, p. 518; Benth. Fl. Austral. II, p. 431; Hook. f. Fl. Brit. Ind. II, p. 341; Miq. Prol. Fl. Jap. 222; Forbes et Hemsl. Ind. Fl. Sin. I, p. 237; King, in Journ. As. Soc. Beng. LXVI (1897) p. 296; Henry, List Pl. Formos. p. 40.

R. asper, D. Don, Prodr. Fl. Nep. p. 234 (non Presl).

R. pinnatus, Willd. Sp. Pl. II, p. 1081.

Var. coronarius, Sims, in Bot. Mag. t. 1783; DC. Prodr. II, p. 556; Maxim. in Mél. Biol. VIII (1872) p. 388; Franch. et Sav. Enum. Pl. Jap. I, p. 126.

R. Commersonii, Poir. Encycl. VI, p. 240.

R. sinensis, Hortul. ex Ser. in DC. Prodr. II, p. 556.

Flore simplici, Maxim. l.c.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsley*).

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INSULA UTCHINÂ (*Tashiro*! April. 1887, fl. et frf., *Matsumura*! 1897, fl.): in Nishibara-madjiri ad montem Binnu-taki (*R. Tîra*! Mart. (?) 1895, flor.); ad Nâfa in Idzunzatchi-mura (*Yamada*! 1882, steril.).

NOM. LUTCH.: Mudji-itchahi (U.) ex *Yamada*.

DISTRIB. Japan, Formosa, Hongkong, China, the Malay Peninsula and Archipelago, and the Himalayas.

R. parvifolius, L. Sp. Pl. ed. 2, p. 707; Lour. Fl. Cochinch. p. 324; DC. Prodr. II, p. 564; Hook. et Arn. Bot. Beech. Voy. pp. 184 et 262; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 126; Benth Fl. Hongk. p. 105, et Fl. Austral. II, p. 430: "Bot. Reg. t. 496"; Miq. Prol. Fl. Jap. p. 222; Franch. et Sav. Enum. Pl. Jap. I, p. 127; Maxim. in Mél. Biol. VIII (1872) p. 392 (excl. syn. R. foliolosus et R. microphyllus, D. Don); Forbes et Hemsl. Ind. Fl. Sin. I, p. 235; Henry, List Pl. Formos. p. 40.

R. triphyllus, Thunb. Fl. Jap. p. 215.

LÛTCHÛ (*Wright* sec. *Bentham*).

INSULA UTCHINÂ (*Tashiro*! Majo 1887, deflor.): inter Nâfa et Tchatan (*T. Itō*, n. 957, 21 Aug. 1894, flor.).

ARCHIPELAGO YÊMA: insula Kuru-shima (ex *Tashiro*).

DISTRIB. Japan, Formosa, Hongkong, China, Corea and Eastern Australia.

R. abortivus, O. Kuntze, "Methodik, pp. 68, 69, et 78," ex Forbes et Hemsl. Ind. Fl. Sin. I, p. 229.

LÛTCHÛ (*Wright*, n. 72 sec. *Forbes* et *Hemsl.*).

DISTRIB. Northern India.

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Fragaria, L.

F. indica, Andr. "Bot. Rep. t. 479"; Ser. in DC. Prodr. II, p. 571; Roxb. Fl. Ind. II, p. 520; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 300; Wight, Ic. Pl. Ind. Or. t. 989; "Bot. Reg. t. 61"; Hook. f. Fl. Brit. Ind. II, p. 343; Miq. Prol. Fl. Jap. p. 225; Franch et Sav. Enum. Pl. Jap. I, p. 129; Franch. Pl. David. I, p. 110; Forbes et Hemsl. Ind. Fl. Sin. I, p. 240; Henry, List Pl. Formos. p. 40.

F. arguta, Lindl. in "Wall. Cat. n. 1237."

F. malayana, Roxb. Fl. Ind. II, p. 520.

F. nilgrica, Zenker, "Pl. Ind. Dec. I, p. 7, t. 9."

F. Roxburghii, Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 300 (nomen).

Duchesnea fragarioides, Smith, in Trans. Linn. Soc. X (1811) p. 373; Miq. Fl. Ind. Bat. I, pt. 1, p. 372.

D. fragariformis, D. Don. Prodr. Fl. Nep. 233.

D. chrysantha, Miq. Fl. Ind. Bat. I, pt. 1, p. 372.

INSULA UTCHINÂ (*Tashiro*! Majo 1887, fl.).

ARCHIPELAGO YÊMA: insula Ishigatchi monte Suri (*Aragatchi*! Martio 1895).

DISTRIB. Japan, Formosa, China, the Malay Islands, India, to Afghanistan.

Potentilla, L.

P. centigrana, Maxim. in Mél. Biol. IX (1873) p. 156; Franch. et Sav. Enum. Pl. Jap. II, p. 341; Forbes et Hemsl. Ind. Fl. Sin. I, p. 241.

P. reptans var. trifoliata, A. Gray, Bot. Jap. in Mem. Amer. Acad. n. s. VI (1859) p. 387.

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LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*).

DISTRIB. Japan.

Agrimonia, L.

A. Eupatoria, L. Sp. Pl. ed. I, p. 448; Thunb. Fl. Jap. p. 195; DC. Prodr. II, p. 587; Ledeb. Fl. Alt. II, p. 204, et Fl. Ross. II, p. 31; Hook. f. Fl. Brit. Ind. II, p. 361; Forbes et Hemsl. Ind. Fl. Sin. I, p. 246; Henry, List Pl. Formos. p. 40.

A. lanata, Wall. "Cat. n. 709."

A. nepalensis, D. Don, Prodr. Fl. Nep. p. 229.

A. pilosa, Ledeb. "Ind. Sem. Hort. Dorpat. Suppl. (1823) p. 1," Fl. Alt. II, p. 205, et Fl. Ross. II, p. 32; DC. Prodr. II, p. 588; Hook. f. Fl. Brit. Ind. II, p. 361; Engl. et Maxim. in Engl. Bot. Jahrb. VI (1885) p. 63.

A. viscidula, Bunge, Enum. Pl. Chin. Bor. p. 26; Hance, in Journ. Linn. Soc. XIII (1873) p. 80.

A. viscidula var. japonica, Miq. Prol. Fl. Jap. p. 133; Franch. et Sav. Enum. Pl. Jap. I, p. 133.

A. Eupatoria var pilosa, Makino, in Bot. Mag. Tōkyō, X, pt. 2 (1896) p. 60.

LÛTCHÛ, sec. *Forbes* et *Hemsl.*

INSULA UTCHINÂ (*Tashiro*! April. 1887, fl. et frf.): inter Tchatan et Unna (*T. Itō*, n. 988, 22 Aug. 1894, flor.); ad oppidum Shui (*Kuroiwa* e *Makino*).

ARCHIPELAGO YÊMA: insula Ishigatchi (ex *Itō* in mscr.).

DISTRIB. All round the north temperate zone. Found in Japan, Formosa, China and Corea.

We follow Forbes and Hemsley (l.c.), who, though examining a large number of specimens, yet failed to distinguish *A.*

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Eupatoria, *A. pilosa*, and *A. viscidula*, the last represents, an intermediate form between the first two.

Poterium, L.

P. tenuifolium, Franch. et Sav. Enum. Pl. Jap. I, p. 133; Forbes et Hemsl. Ind. Fl. Sin. I, p. 247.

Sanguisorba tenuifolia, Fisch. ex "Link., Enum Hort. Berol. I, p. 144"; Ledeb. Fl. Ross. II, p. 28; "Franch. in Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 216"; Kanitz, Anthophyta Jap. in Természetrajzi Füzetek, 1878, [p. 29].

INSULA AMAMI-ŌSHIMA: in collibus silv. (*Weiss* sec. *Kanitz*).

DISTRIB. Siberia, Japan, China and Corea.

Rosa, L.

R. Luciæ, Franch. et Rochebr. (pro parte) ex "Crépin, in Bull. Soc. Bot. Belg. X (1871) p. 324, IX (1876) p. 204"; "Crépin, Prim. Monogr. Ros. fasc. 3, p. 258," et in "Bull. Soc. Bot. Belg. XIII (1874) p. 251, XVII (1879) p. 285," et in Compt. Rend. Bot. Soc. Belg. XXV, pt. 2 (1887) p. 13; Franch. et Sav. Enum. Pl. Jap. I, p. 135, II, p. 344; Engl. et Maxim. in Engler, Bot. Jahrb. VI (1885) p. 63; Forbes et Hemsl. Ind. Fl. Sin. I, p. 251; Bot. Mag. t. 7421; Henry, List Pl. Formos. p. 40.

R. moschata, Benth. Fl. Hongk. p. 106.

INSULA UTCHINÂ (*Tashiro*! Julio 1887, fl., sub "Rosa multiflora, Th. var."), ad Yuntanza (*Matsumura*! 24 April. 1897, fl.).

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DISTRIB. Japan, Formosa, Hongkong, China and Corea.

Leaflets oval, rounded at the base, glabrous, crenate-dentate; stipules shortly and unequally dentate, adhering to the petiole; style pubescent.

R. bracteata, Wendl. "Obs. p. 50," et "Hort. Herrench. t. 23"; DC. Prodr. II, p. 602; "Lindl. Ros. Monogr. p. 10 (incl. β scabriusculus)"; "Bot. Mag. t. 1377; Crépin, in "Bull. Soc. Bot. Belg. XIV, p. 137", et in Comptes-rendus Soc. Bot. Belg. XXV, pt. 2 (1887) p. 14"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 249; Baker, in Gard. Chron. n. s. XXIV (1885) p. 199; Henry, List Pl. Formos. p. 40.

R. lucida, Lawr. "Roses, t. 84."

R. involucrata, Braam, "Ic. Pl. in Chin. Nasc. t. 17" (nec. Roxb.).

R. Macartnea, Dum.-Cours. "Bot. Cult. ed. 2, V, 483, non ed. 1, III, p. 351."

R. Serræ, Dehnhardt, "Rivista Napol. I, 3, p. 163."

ARCHIPELAGO YÊMA (*Tashiro*! Julio 1887, fl.): insula Ishigatchi (*T. Itō*, n. 1281, 11 Aug. 1894, fl. et frf.).

DISTRIB. Formosa (Tamsui, *Makino*!) and China.

Flowers bracteate, large and solitary, petals white, obcordate.

Common on wayside near the village of Nagura, in the island of Ishigachi.

***R. indica,** L. Sp. Pl. ed. 1, p. 492, excl. syn. Petiv.; DC. Prodr. II, p. 600; Lour. Fl. Cochinch. p. 323; Miq. Prol. Fl. Jap. p. 227; Franch. et Sav. Enum. Pl. Jap. I, p. 136;

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Hook. f. Fl. Brit. Ind. II, p. 364; Baker, in Gard. Chron. n.s. XXIV (1885) p. 199; Forbes et Hemsl. Ind. Fl. Sin. I, p. 249; Henry, List Pl. Formos. p. 40.

R. bengalensis, Pers. Syn. Pl. II, p. 50.

R. chinenis, Jacq. "Obs. III, p. 7, t. 55"; Willd. Sp. Pl. II, p. 1078; Roxb. Fl. Ind. p. 513.

R. diversifolia, Vent. "Hort. Cels. p. 35."

R. longifolia, Willd. Sp. Pl. II, p. 1079.

R. odoratissima, Hort. ex Steud. Nom. ed. 3, II, p. 470.

R. pseudo-indica, Lindl. "Ros. Monogr. p. 132."

R. sempervirens, Curt. Bot. Mag. t. 284; Roxb. Fl. Ind. II, p. 514.

R. sinica, L. "Syst. Veg. ed. 13, p. 398."

INSULA UTCHINÂ: in portu Nâfa ad Idzunzatchimura (*Yamada*! 22 Aug. 1882).

DISTRIB. Formosa and China; cultivated in Japan and India.

Cratægus, L.

***C. sanguinea**, Pall. Fl. Ross. I, p. 25, t. 11; Ledeb. Fl. Alt. II, p. 221, et Fl. Ross. II, p. 88; Miq. Prol. Fl. Jap. p. 228; Maxim. in Mél. Biol. IX (1877) p. 175; Forbes et Hemsl. Ind. Fl. Sin. I, p. 260; Franch. et Sav. Enum. Pl. Jap. I, p. 140.

C. Cosansasi, Sieb. ex Miq. Prol. Fl. p. 228.

Mespilus Cosansasi, C. Koch, in "Wochenschr. f. Gärtn. V (1862) p. 396," et in Miq. Ann. Mus. Lugd. Bat. I, p. 249.

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LÛTCHÛ, ex *Iwasaki.* An culta?

DISTRIB. Siberia, Mongolia, Mandshuria, Amur, and Sachalin; cultivated in Japan and China.

Eriobotrya, Lindl.

* **E. japonica,** Lindl. in Trans. Linn. Soc. XIII, p. 102; DC. Prodr. II, p. 631; Sieb. et Zucc. Fl. Jap. I, p. 182, t. 97; Miq. Prol. Fl. Jap. pp. 229 et 372; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 302; Wight, Ic. Pl. Ind. Or. t. 226; Maxim. in Mél. Biol. IX (1873) p. 175; Hook. f. Fl. Brit. Ind. II, p. 372; Forbes et Hemsl. Ind. Fl. Sin. I, p. 261.

Cratægus Bibas, Lour. Fl. Cochinch. p. 319.

Mespilus japonica, Thunb. Fl. Jap. p. 206; "Bot. Reg. t. 365"; Sieb. Syn. Pl. Oecon. n. 356.

Photinia japonica, Franch. et Sav. Enum. Pl. Jap. I, p. 142.

LÛTCHÛ, cult. ex *Tashiro* in litt.

NOM. LUTCH: Biwa (U.).

DISTRIB. Native of China; commonly cultivated in Japan, China, and also in Malaya and India.

Photinia, Lindl.

P. Wrightiana, Maxim. in Mél. Biol. IX (1877) p. 180 in adnot., et XII (1888) p. 726.

P. arbustifolia, A. Gray, Bot. Jap. in Mem. Am. Acad. Arts et Sc. n. s. VI (1859) p. 338; Miq. Prol. Fl. Jap. p. 378; Maxim. in Mél. Biol. IX (1877) p. 180 (non Lindl.).

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P. prunifolia, Forbes et Hemsl. Ind. Fl. Sin. I, p. 263, pro parte?

LÛTCHÛ: frutex 2-3 metralis (*Tashiro*, flor., fide *Maximowicz.*).

INSULA UTCHINÂ (*Tashiro*! April. 1887, fl., *Matsumura*! 1897, fl.): inter Tchatan et Unna (*T. Itō*, n. 989 et n. 990, 22 Aug. 1894, frf.); circa Yuntanza (*S. Tanaka*! n. 52, 15 Majo 1891, steril.); monte Unna-daki (*T. Itō*, n. 1093, 23 Aug. 1894, frf.); inter montem Nagu-daki et Kushi (*S. Tanaka*! n. 166, 20 Majo 1891, fl.).

ARCHIPELAGO YÊMA: insula Kuru-shima, sec. *Tashiro*.

NOM. LUTCH.: Otoko Tekatchi (Ō.), sec. *S. Tanaka* in schedula.

DISTRIB. Bonin Islands!

Forbes and Hemsley (loc. cit.), however, include the specimens from the Luchu and the Bonin Islands, under *P. prunifolia*, Lindl.

Raphiolepis, Lindl.

R. japonica, Sieb. et Zucc. Fl. Jap. I, p. 162, et Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 130; Miq. Prol. Fl. Jap. p. 229 (excl. syn. Thunb.); C. Koch, in Miq. Ann. Mus. Bat. Lugd. Bat. I. p. 250; Franch. et Sav. Enum. Pl. Jap. I, p. 142; Maxim. in Mél. Biol. IX (1877) p. 181; Engler et Maxim. in Engler, Bot. Jahrb. VI (1885) p. 63; Forbes et Hemsl. Ind. Fl. Sin. I, p. 264.

Mespilus Sieboldii, Blume, Bijdr. p. 1102.

Laurus umbellata, Thunb. Fl. Jap. p. 175, ex Maxim. l.c.

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INSULA AMAMI-ŌSHIMA (*Dœderlein* sec. *Engler* et *Maxim.*) : ad Nazé (*S. Tanaka* ! n. 458, 31 Aug. 1891, frf.) ; inter Nazé et Yamatohama (*T. Itō*, n. 561, 10 Julio 1894).

INSULA UTCHINÂ (*Tashiro* ! April. 1887, fl. et frf., *Matsumura* ! 1897, fl.) : in monte Binnu-taki (*Tîra* ! n. 762, 1895) ; monte Unna-daki (*T. Itō*, n. 1064, 23 Aug. 1894, frf.).

INSULA MYÂKU (*T. Itō*, 9 Aug. 1894, n. 1161, fl. et frf.) : circa Gushiku (*Tatitu* ! n. 1240, 25 Majo 1895, frf.).

ARCHIPELAGO YÊMA : insula Irumuti (*T. Itō*, n. 1420, 13 Aug. 1894, steril.) ; insula Kuru-shima (sec. *Tashiro*).

NOM. LUTCH.: Teka-tchâ (U.), sec. *Matsumura* ; Toka-tsigi (nom. ins. Kuru-shima), fide *Tashiro* ; Teitchigi (Ō.), sec. *S. Tanaka* in sched.

DISTRIB. Japan.

Var. integerrima, Hook. f. in Bot. Mag. t. 5510 ; Maxim. in Mél. Biol. IX (1877) p. 181.

R. integerrima, Hook. et Arn. Bot. Beech. Voy. p. 263 ; Walp. Repert. II, p. 57.

R. Mertensii, Sieb. et Zucc. Fl. Jap. I, p. 164, et Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 130.

LÛTCHÛ (*Mertens* sec. *Sieb.* et *Zucc.*).

INSULA AMAMI-ŌSHIMA : ad Nazé (*T. Itō*, n. 501, 21 Julio 1894, steril.).

INSULA UTCHINÂ : in litoribus prope Unna (*Matsumura* ! 25 April. 1899, fl.).

NOM. LUTCH.: Têtsuki (O.), ex T. Itō.

DISTRIB. Japan, the Vries Islands ! and the Bonin Islands !

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Osteomeles, Lindl.

O. anthyllidifolia, Lindl. in Trans. Linn. Soc. XIII (1891) p. 98, t. 8; DC. Prodr. II, p. 633; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 131; A. Gray, Bot. Jap. in Mem. Am. Acad. n. s. VI (1857) p. 388; Maxim. in Mél. Biol. IX (1877) pp. 182 et 388; Hemsl. Bot 'Challenger' Exped. I, Introd. p. 18, et in Journ. Linn. Soc. XXVIII (1890) p. 57; Hillebrand, Fl. Hawaii. Isl. p. 119; Forbes et Hemsl. Ind. Fl. Sin. I, p. 265; Bot. Mag. t. 7354; Shitsumon Honzō, Gwaihen, III, t. 20.

O. subrotunda, C. Koch, in Miq. Ann. Mus. Bot. Lugd. Bat. I, p. 250; Miq. Prol. Fl. Jap. p. 229; Franch. et Sav. Enum. Pl. Jap. I, p. 143.

Lûtchû, sec. *A. Gray.*

Insula Utchinâ: ad Unna-madjiri (*Tashiro*! April. 1887, deflor., *Matsumura*! 25 April. 1897, fl.); ad Kushi-madjiri (*Tashiro*! April. 1887, deflor.).

Distrib. Japan, the Bonin Islands! Shan States, and the Hawaiian and Pitcairn Islands.

In Luchuan specimens the leaflets are rotundate or oblong, often emarginate; while in those from the Bonin Islands they are very narrow.

SAXIFRAGACEÆ.

Hydrangea, Gronov. ex L.

H. virens, Sieb. Syn. Hydrang. Gen. Sp. Jap. in Nov. Ac. Nat. Cur. XIV, 2 (1829) p. 690; Sieb. et Zucc. Fl. Jap. I,

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p. 114, t. 60; A. Gray, List Pl. Jap. in Mem. Am. Acad. II (1856) p. 312; Maxim. Revis. Hydrang. As. Or. in Mém. Acad. Pétersb. sér. 7, X, n. 16 (1867) p. 6; Franch. et Sav. Enum. Pl. Jap. I, p. 149; Henry, List Pl. Formos. p. 41.

H. scandens, Ser. in DC. Prodr. IV, p. 15; Miq. Prol. Fl. Jap. p. 262.

Viburnum scandens, L. f. Suppl. p. 184.

V. virens, Thunb. Fl. Jap. p. 123 (1784).

LÛTCHÛ (*Tashiro*! 1887, fl., *H. Nakagawa*! n. 139, frf., *K. Hirasawa*! 1894, fructif. in Herb. Normal School, Kagoshima).

INSULA UTCHINÂ: in montibus Unna-daki (*T. Itō*, n. 1065, 23 Aug. 1894, fructif.) et Nagu-daki (*S. Tanaka*! 20 Majo 1891, n. 187, fl.).

DISTRIB. Japan.

H. chinensis, Maxim. Revis. Hydrang. As. Or. in Mém. Acad. Pétersb. sér. 7, X, n. 16 (1867) p. 7; Forbes et Hemsl. Ind. Fl. Sin. I, p. 273; Hance, in Journ. Bot. 1878, p. 11; Henry, List Pl. Formos. p. 41.

ARCHIPELAGO YÊMA: in montanis (*Tashiro*! Julio 1887, frf.).

DISTRIB. Formosa and China.

H. Hortensia, Sieb. Syn. Hydrang. Gen. Sp. Jap. in Nov. Act. Nat. Cur. XIV, 2 (1826) p. 688; Ser. in DC. Prodr. IV, p. 15 (1830); A. Gray, List Pl. Jap. in Mem. Am. Acad. II, (1856) p. 312; Maxim. Revis. Hydrang. As. Or. in Mém. Acad. Pétersb. sér. 7, X, n. 16 (1867) p. 11; Miq. Prol. Fl. Jap. p. 261; Forbes et Hemsl. Ind. Fl. Sin. I, p. 273.

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H. acuminata, cum var. Buergeri, Sieb. et Zucc. Fl. Jap. I, p. 110, tt. 56 et 57.

H. Azisai, Sieb. Syn. Hydrang. Gen. Sp. Jap. in Nov. Act. Nat. Cur. XIV, 2 (1826) p. 689; Sieb. et Zucc. Fl. Jap. I, p. 104, t. 51.

H. Belzonii, Sieb. et Zucc. Pl. Jap. I, p. 109, t. 55.

H. hortensis, Smith, "Ic. Pict. I, p. 12, t. 12 (1792)"; Willd. Sp. Pl. I, p. 633; Franch. et Sav. Enum. Pl. Jap. I, p. 150.

H. japonica, Sieb. Syn. Hydrang. Gen. Sp. Jap. in Nov. Act. Nat. Cur. XIV, 2 (1826) p. 689; Sieb. et Zucc. Fl. Jap. I, p. 106, t. 53.

H. Otaksa, Sieb. et Zucc. Fl. Jap. I, p. 105, t. 55.

H. Shitsitan, Sieb. Syn. Hydrang. in Nov. Act. Nat. Cur. XIV, 2 (1826) p. 692.

H. stellata, Sieb. et Zucc. Fl. Jap. I, p. 112, t. 59.

Hortensia opuloides, Lam. Encycl. III, p. 136 (1789).

Hort. speciosa, Pers. Syn. I, p. 505.

Primula mutabilis, Lour. Fl. Cochinch. p. 104.

LÛTCHÛ: in insula Cleopatra (*Wright* sec. *Forbes* et *Hemsl.*).

DISTRIB. Japan and China.

Pileostegia, Hook. f. et Thoms.

P. viburnoides, Hook. f. et Thoms. in Journ. Linn. Soc. II (1858) p. 76, t. 2; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 405; Hance, in Journ. Bot. 1874, p. 260, et 1887, p. 12;

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Forbes et Hemsl. Ind. Fl. Sin. I, p. 275; Henry, List Pl. Formos. p. 41.

Var. parviflora, Oliver, ex Maxim. Revis. Hydrang. As. Or. in Mém. Akad. Pétersb. sér. 7, X, n. 16 (1867) p. 18; Engl. et Maxim. in Engler, Bot. Jahrb. VI (1885) p. 61.

Insula Amami-Ōshima (*Doederlein* sec. *Engler* et *Maxim.*): in montanis (*Tashiro*! Sept. 1887, fructif. immat.); inter Nazé et Yamatohama (*T. Itō*, n. 562, 16 Junio 1894); circa Miyamantō inter Yamatohama et Taken (*T. Itō*, n. 609, 17 Junio 1894).

Insula Utchinâ: in montanis tractu Kundjan-madjiri (*Tashiro*! Aug. 1887, frf.); circa montem Nagu-daki (*S. Tanaka*! n. 167, 20 Majo 1891, steril.).

Archipelago Yêma: in montanis (*Tashiro*! Aug. 1887, frf.).

Distrib. Formosa, China and the Khasia mountains.

Deutzia, Thunb.

D. scabra, Thunb. Nov. Gen. pp. 19, 20, et 21, cum icon. (1878), et Fl. Jap. p. 185, t. 24; DC. Prodr. IV, p. 17; Maxim. Revis. Hydrang. As. Or. in Mém. Acad. Pétersb. sér. 7, X, n. 16 (1867) p. 24; Miq. Prol. Fl. Jap. p. 263; Hance, in Journ. Bot. 1878, p. 11; S. Moore, in Journ. Bot. 1878, p. 138; "Bot. Regist. t. 1718"; Bot. Mag. t. 3838; Franch. et Sav. Enum. Pl. Jap. I, p. 153; Forbes et Hemsl. Ind. Fl. Sin. I, p. 276; Henry, List Pl. Formos. p. 41.

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D. crenata, Sieb. et Zucc. Fl. Jap. I, p. 19, t. 6; Maxim. Revis. Hydrang. As. Or. in Mém. Acad. Pétersb. sér. 7, X, n. 16 (1867) pp. 24 et 45.

LÛTCHÛ (*Wright*, *Carpenter* sec. *Forbes* et *Hemsl.*).

DISTRIB. Japan, Formosa and China.

Itea, Gronov. ex L.

I. chinensis, Hook. et Arn. Bot. Beech. Voy. p. 188, t. 39; Seemann, Bot. Voy. 'Herald,' p. 379; Benth. Fl. Hongk. p. 129; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 408; Maxim. in Mél. Biol. XII (1886) p. 459; Forbes et Hemsl. Ind. Fl. Sin. I, p. 278; Henry, List Pl. Formos. p. 41.

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, fl.).

INSULA UTCHINÂ: in tractu Kundjan (*Tashiro*! Majo 1887, fl.).

ARCHIPELAGO YÊMA (*Tashiro*! Julio 1887, fl.): insula Ishigatchi (*T. Itō*, 1282, 11 Aug. 1894, fl. et frf.); insula Irumuti ad pagum Sunai-mura (*S. Tanaka*! n. 339, 15 et 19 Junio 1891, steril.).

DISTRIB. Formosa (*Makino*!), Hongkong, South China, and the Khasia mountains.

Var. subserrata, Maxim. in Mél. Biol. XII (1886) p. 459.

INSULA AMAMI-ŌSHIMA (*Tashiro*! sec. *Maxim.*).

ARCHIPELAGO YÊMA: insula Yunakuni ad montem Urabu-daki (*S. Tanaka*! n. 393, 13 Junio 1891, steril.).

DISTRIB. Formosa (*Makino*! *Ōwatari*!).

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CRASSULACEÆ.

Bryophyllum, Salisb.

B. calycinum, Salisb. "Parad. Lond. t. 3"; DC. Prodr. III, 396; Bot. Mag. t. 1409; Benth. Fl. Hongk. p. 127; Oliv. Fl. Trop. Afr. II, p. 390; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 360; Hook. f. et Thoms. in Journ. Linn. Soc. II (1858) p. 90; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 413; Maxim. in Mél. Biol. XI (1883) p. 721; Hillebrand, Fl. Hawaii. Isl. p. 122; Forbes et Hemsl. Ind. Fl. Sin. I, p. 280; Makino, in Bot. Mag. Tōkyō, X, pt. 2 (1896) pp. 56 et 59; Henry, List Pl. Formos. p. 41.

B. pinnatum, Kurz, in "Journ. As. Soc. Beng. LX, pt. 2 (1876) p. 309."

Cotyledon rhizophylla, Roxb. "Hort. Beng. p. 34," et Fl. Ind. II, p. 456.

C. pinnata, Lam. Encycl. II, p. 141.

Crassula pinnata, L. f. Suppl. p. 191; Lour. Fl. Cochinch. p. 185.

Kalanchoe pinnata, Pers. Syn. I, p. 446; Hance, in Journ. Linn. Soc. XIII (1872) p. 103.

Insula Amami-Ōshima: ad portum Nazé (*T. Itō,* n. 502, 15 Julio 1894, steril.).

Insula Utchinâ: in portu Nâfa (*T. Itō,* n. 888, 17 Aug. 1894, steril.) ad Idzunzatchi-mura (*Yamada*! 1882, steril.); in oppido Shui (ex *T. Itō, Kuroiwa* e *Makino*); circa Tchatan (*S. Tanaka*! n. 70, 15 Majo 1891, fl.).

Insula Myâku, ex *T. Itō.*

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NOM. LUTCH.: Ushiti (U.), ex *Tashiro* in litt.; Orandagusa seu Dan-sō (Ō), ex *T. Itō*.

DISTRIB. Said to be the native of tropical Africa, but now dispersed in warm countries, including Formosa, Hongkong, South China, India, Mexico and Madeira.

Kalanchoe, Adans.

K. spathulata, DC. "Pl. Grasses, t. 65," et Prodr. III, p. 495; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 414; Maxim. in Mél. Biol. XI (1883) p. 721; Forbes et Hemsl. Ind. Fl. Sin. I, p. 281.

K. crenata, Britten, in Oliv. Fl. Trop. Afr. II, p. 394, pro parte.

K. nudicaulis, Buch.-Ham. ex Clarke, in Hook. f. Fl. Brit. Ind. II, p. 414.

K. varians, Haw. in "Phil. Mag. Lond. n.s. IX (1829) p. 302"; Hook. f. et Thoms. in Journ. Linn. Soc. II (1858) p. 91.

Cotyledon spathulata, Poir. Encycl. Suppl. 2, p. 373.

LŪTCHŪ (*Wright*): ad portum Nâfa, in muris gregaria (*Weyrich*), sec. *Maxim.*

DISTRIB. South China, Burma, tropical India and Java.

Sedum, L.

S. lineare, Thunb. Fl. Jap. p. 187; DC. Prodr. III, p. 410; Miq. Prol. Fl. Jap. p. 88, excl. γ et δ; Franch. et Sav. Enum. Pl. Jap. I, p. 161; Maxim. in Mél. Biol. XI (1883) p.

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763; Forbes et Hemsl. Ind. Fl. Sin. I, p. 285; Shitsumon Honzō, Gwai-hen, III, t. 9.

LÛTCHÛ, sec. Shitsumon Honzō, l.c.

DISTRIB. Japan.

Maximowicz identified this species by the figure in the Shitsumon Honzō, loc. cit.

S. uniflorum, Hook. et Arn. Bot. Beech. Voy. p. 263; Walp. Repert. II, 261; Forbes et Hemsl. Ind. Fl. Sin. I, p. 288.

LÛTCHÛ (*Beechey, Wright,* sec. *Forbes* et *Hemsl., H. Nakagawa*! n. 90, steril.).

INSULA UTCHINÂ (*Tashiro*! April. 1887, flor.): in tractu Nakugan ad Yuntanza (*S. Tanaka*! n. 54, 15 Majo 1891, flor.); in maritimis arenosis inter Unna et Nagu (*T. Itō,* n. 1066, 23 Aug. 1894).

ARCHIPELAGO YÊMA (*Tashiro*! Aug. 1887, flor.): insula Kuru-shima (ex *Tashiro*).

DISTRIB. Endemic.

Tashiro's specimens have small, obscure flowers, one on the top of the stem and on each of the many branches; stamens shorter than the perianth, anther oblong-globose, filament filiform and glabrous.

S. Alfredi, Hance, in Journ. Bot. VIII (1870) p. 7; Maxim. in Mél. Biol. XI (1883) p. 768; Forbes et Hemsl. Ind. Fl. Sin. I, p. 283.

S. lineare var. γ. floribundum, Miq. Prol. Fl. Jap. p. 89, fide Maxim.

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S. bulbiferum, Makino! Ill. Fl. Jap. I, n. 10, p. 2, t. 60.

INSULA UTCHINÂ: in tractu Nakugan (*Tashiro*! April. 1887, fl.); in tractu Shimadjiri circa Tumigushiku (*S. Tanaka*! n. 11, 13 Majo 1891, fl.).

DISTRIB. Japan and China.

Tashiro's specimens seem to agree exactly with Hance's diagnosis of *S. Alfredi.*

S. Makinoi, Maxim. (?) in Mél. Biol. XII (1888) p. 728.

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, steril.).

INSULA UTCHINÂ: inter Tchatan et Unna (*T. Itō*, n. 991, 22 Aug. 1894, steril.).

Stem procumbent, often rooting at the nodes.

In the form of leaves, our specimens agree with the Japanese *S. Makinoi*, Maxim., but we should like to defer pronouncing as to their identity until we examine more complete specimens.

S. sp.

INSULA AMAMI-ŌSHIMA: inter Nazé et Yamatohama (*T. Itō*, n. 563, 6 Julio 1894, steril.).

Stem thick, fleshy, suberect (?), not procumbent. Leaves alternate or aggregate, glabrous, fleshy, obovate or obovate-spathulate, attenuate toward the base, entire.

S. sp.

INSULA MYÂKU (*Tashiro*! Julio 1887, frf.).

Tashiro's specimens, with many fruits consisting of straight and acuminate carpels; and collected after defoliation and de-

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siccation in the state of nature, are too imperfect for specific determination.

DROSERACEÆ.

Drosera, L.

D. Burmanni, Vahl, "Symb. III, p. 50"; DC. Prodr. I, p. 318; D. Don, Prodr. Fl. Nep. p. 212; Roxb. Fl. Ind. II, p. 113; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 34; Wight, "Illustr. t. 20," et Ic. Pl. Ind. Or. t. 944; Miq. Fl. Ind. Bat. I, pt. 2, p. 120; Planch. in Ann. Sc. Nat. sér. 3, IX (1848) p. 190"; Benth. Fl. Hongk. p. 129, et Fl. Austral. II, p. 459; Oliv. Fl. Trop. Afr. II, p. 402; Hook. f. et Thoms. in Journ. Linn. Soc. II (1858) p. 82; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 424; Forbes et Hemsl. Ind. Fl. Sin. I, p. 288; King, in Journ. As. Soc. Beng. LXVI, pt. 2 (1897) p. 306; Henry, List Pl. Formos. p. 42.

Insula Amami-Ōshima (*Carpenter* sec. *Forbes* et *Hemsl.*): inter Nazé et Yamatohama (*T. Itō*, n. 564, 16 Julio 1894, fl.); inter Yamatohama et Taken (*T. Itō*, n. 608, 17 Julio 1894, fl. et frf.).

Insula Utchinâ (*H. Nakagawa*! n. 141, deflor., *Matsumura*! 1897, fl.): in Udjimi-madjiri (*Tashiro*! April. 1887, fl.); circa Yuntanza (*S. Tanaka*! n. 53, 15 Majo 1891, fl. et frf.); inter Tchatan et Unna (*T. Itō*, n. 992, 24 Aug. 1894, fl.); in montibus Unna-daki (*T. Itō*, n. 1067, 23 Aug. 1894, fl. et frf.) et Nagu-daki (*T. Itō*, n. 114, 23 Aug. 1894, fl.).

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DISTRIB. Japan, Formosa, Hongkong, China, India, Ceylon, Malaya, Africa and Australia.

HAMAMELIDEÆ.

Distylium, Sieb. et Zucc.

D. racemosum, Sieb. et Zucc. Fl. Jap. I, p. 178, t. 94; Benth. Fl. Hongk. p. 133; Miq. Prol. Fl. Jap. p. 208; Franch. et Sav. Enum. Pl. Jap. I, p. 162; Engler, Bot. Jahrb. VI (1885) p. 61; Forbes et Hemsl. Ind. Fl. Sin. I, p. 289; Henry, List Pl. Formos. p. 42.

LÛTCHÛ (*Champion, Wright* sec. *Forbes* et *Hemsl.*).

INSULA AMAMI-ŌSHIMA (*Doederlein* ex *Engler*).

INSULA UTCHINÂ (e *Tashiro* in litt., *Matsumura*! 1897, fruct. immat.).

INSULA MYÂKU (*Tashiro*! Julio 1884, fruct. immat. sub "spontanea," *T. Itō*, n. 1162, 9 Aug. 1894).

ARCHIPELAGO YÊMA: insula Irumuti (*T. Itō*, n. 1421, 12 Aug. 1894); insula Utchibanari (*T. Itō*, n. 1485, 12 Aug. 1894); insula Yunakuni ad montem Urabu-daki (*S. Tanaka*! n. 394, 13 Junio 1891, frf.).

DISTRIB. Japan, Formosa, Hongkong; and *var. chinensis*, Franch. in China. An allied species, *D. indicum*, Benth. grows in the Khasia mountains.

HALORAGEÆ.

Haloragis, Forst.

H. micrantha, B. Br. in "Flinder's Voy. II, p. 550";

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Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 133; Miq. Prol. Fl. Jap. p. 264; Benth. Fl. Austral. II, p. 482; Hook. f. Handb. N. Zeal. Fl. p. 66; Franch. et Sav. Enum. Pl. Jap. I, p. 164; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 430; Forbes et Hemsl. Ind. Fl. Sin. I, p. 292; King, in Journ. As. Soc. Beng. LXVI, pt. 2 (1897) p. 310.

H. tenella, Brongn. in "Duperr. Voy. Coq. Bot. t. 68, t. B."

Goniocarpus micranthus, Koen. in "Koen. et Sims, Ann. Bot. I (1805) p. 546, t. 12."

Gonocarpus micranthus, Thunb. "Nov. Gen. p. 55 (1783)," et Fl. Jap. p. 69, t. 15; DC. Prodr. III, p. 66.

Archipelago Yêma: insula Kuru-shima, sec. *Tashiro*, l.c.

Distrib. Japan, South China, to Eastern India, Malaya, Australia and New Zealand.

Myriophyllum, L.

M. spicatum, L. Sp. Pl. ed. 1, p. 992; DC. Prodr. III, p. 68; Eng. Bot. t. 83; Ledeb. Fl. Alt. IV, p. 243, et Fl. Ross. II, p. 119; Koch, Syn. Fl. Germ. et Helv. ed. 3, I, p. 211; A. Gray, Man. Bot. N. Un. St. p. 175; Boiss. Fl. Orient. II, p. 755; Franch. et Sav. Enum. Pl. Jap. I, p. 165; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 433; Nyman, Conspect. Fl. Europ. p. 250; Forbes et Hemsl. Ind. Fl. Sin. I, p. 293.

Lûtchû (*Tashiro*! loc. et init. non indicat.).

Insula Amami-Ōshima: inter Nishinakama et Nazé (*T. Itō*, n. 722, 20 Julio 1894).

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DISTRIB. Europe, Siberia, China, Japan, Formosa (Shichiku, *Makino*! 1896), N. Africa and N. America.

Callitriche, L.

C. japonica, Engelm. ex Helgem. Beitr. z. Kenntn. d. Wasserst. in Verhandl. Bot. Ver. Brandenb. X (1868) p. 113; Franch. et Sav. Enum. Pl. Jap. II, p. 369.

C. verna var. terrestris, Franch. et Sav. Enum. Pl. Jap. I, p. 165.

INSULA UTCHINÂ : in tractu Kundjan (*Tashiro*! Martio 1887, fl. et frf.).

ARCHIPELAGO YÊMA (*Tashiro*! Sept. 1887, fl. et frf.).

DISTRIB. Japan.

RHIZOPHOREÆ.

Rhizophora, L.

R. mucronata, Lam. Encycl. IV, p. 169, et Illustr. t. 396, f. 2; "Wight, Illustr. I, p. 209," et Ic. Pl. Ind. Or. t. 238; DC. Prodr. III, p. 32; Blume, Mus. Bot. Lugd. Bat. I, p. 133; Kurz, For. Fl. Brit. Burm. I, p. 447; Sonder, in Harv. et Sond. Fl. Cap. II, p. 513; Oliver, Fl. Trop. Afr. II, p. 407; Hensl. in Hook. f. Fl. Brit. Ind. II, p. 435; "Trimen, Fl. Ceyl. I, p. 151"; King, in Journ. As. Soc. Beng. LXVI, pt. 2 (1897) p. 312; Matsumura, in Bot. Mag. Tōkyō, XI (1897) p. 77; Henry, List Pl. Formos. p. 42.

R. Candelaria, Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 310.

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R. latifolia, Miq. Fl. Ind. Bat. Suppl. p. 324.

R. macrorrhiza, "Griffith, in Trans. Med. Phys. Soc. Calcutt. VIII (1835) p. 2," et Notul. IV, p. 664 (*macrohiya*).

R. Mangle, Roxb. Fl. Ind. II, p. 459 (non. L.).

Insula Utchinâ: ad lacibus Kesadji et Finoko (*Matsumura*! Majo 1897, fl. sub "calyx 4-merus").

Archipelago Yêma (sec. *Tashiro*): insula Irumuti (*S. Tanaka*! 1891, n. 341) ad pagum Fushitati (*T. Itō*, n. 1426, 13 Aug. 1894, fl. et frf.), et in ripis fluminis Nakaragâ (*T. Itō*, n. 1424, 12 Aug. 1894, fl.).

Nom. Lutch.: Kuso Pushiki (Y.), sec. *Tanaka* in litt.

Distrib. Formosa, Malaya, India, Ceylon, Africa and Australia.

Kandelia, Wight et Arn.

K. Rheedii, Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 310; Blume, Mus. Bot. Lugd. Bat. I, p. 135; "Wight, Illustr. I, t. 89"; Hook. Ic. Pl. t. 362; Benth. Fl. Hongk. p. 110; Hensl. in Hook. f. Fl. Brit. Ind. II, p. 437; Kurz, For. Fl. Brit. Burm. I, p. 449; Forbes et Hemsl. Ind. Fl. Sin. I, p. 293; Saida, in Bot. Mag. Tōkyō, III (1889) tt. 14 et 15; Makino, in Bot. Mag. X (1896) p. 57; Matsumura, in Bot. Mag. Tōkyō, XI (1897) p. 77; King, in Journ. As. Soc. Beng. LXVI, pt. 2 (1897) p. 317; Henry, List Pl. Formos. p. 42.

Bruguiera Candel, Steud. Nom. ed. 2, I, p. 231.

Rhizophora Candel, L. Sp. Pl. ed. 1, p. 443; DC. Prodr. III, p. 32.

R. mucronata, Engler, Bot. Jahrb. VI (1885) p. 63 (non Lam.).

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INSULA AMAMI-ŌSHIMA (e *Tashiro*) : inter Nishinakama et Nazé (*T. Itō*, n. 724, 20 Julio 1894, fl.) ; inter Taken et Nishinakama (*T. Itō*, n. 676, 19 Aug. 1894, fl.).

INSULA UTCHINÂ : in tractu Kundjan (*Tashiro*! April. 1887, fruct. immat.) ; ad lacum Kesadji (*Matsumura*! Majo 1897, frf.).

INSULA KUMI, sec. *Tashiro* in MS.

ARCHIPELAGO YÊMA : insula Irumuti ad pagos Sunai (*S. Tanaka*! n. 340, 15 et 19 Junio 1891, fl.) et Fushitati (*T. Itō*, n. 1425, 13 Aug. 1894, fl.), et in ripis fluminis Nakaragâ (*T. Itō*, n. 1422, 12 Aug. 1894, fl.).

DISTRIB. Southern Japan (prov. Satsuma, *T. Itō*), Formosa (*Makino*! 1896), Hongkong, India, Ceylon and Malaya.

Bruguiera, Lam.

G. gymnorrhiza, Lam. Encycl. IV, p. 696, et Illustr. t, 397 ; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 311 ; Blume, Mus. Bot. Lugd. Bat. I, p. 136 ; Miq. Fl. Ind. Bat. I, pt. 1, p. 586 ; Brandis, For. Fl. Ind. p. 219 ; Kurz, For. Fl. Brit. Burm. I, p. 450 ; Sonder, in Harv. et Sond. Fl. Cap. I, p. 514 ; Hensl. in Hook. f. Fl. Brit. Ind. II, p. 437 ; Engler, Bot. Jahrb. VI (1885) p. 63 ; Forbes et Hemsl. Ind. Fl. Sin. I, p. 294 ; " Trimen, Fl. Ceyl. I, p. 153 "; Maxim. in Mél. Biol. XII (1886) p. 459 ; Tashiro, in Bot. Mag. Tōkyō, III (1889) t. 3 ; Matsumura, in Bot. Mag. Tōkyō, XI, pt. 2 (1897) p. 77 ; Makino, in Bot. Mag. Tōkyō, X, pt. 2 (1896) p. 57 ; King, in Journ. As. Soc. Beng. LXVI, pt. 2 (1897) p. 314 ; Henry, List Pl. Formos. p. 42.

B. Rheedii, Miq. Fl. Ind. Bat. I, p. 587 ; Blume, Mus.

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Bot. Lugd. Bat. I, p. 138; Wight, Ic. Pl. Ind. Or. t. 239; Hook. Ic. Pl. t. 397.

Rhizophora gymnorrhiza, L. Sp. Pl. ed. 1, p. 634; Roxb. Fl. Ind. II, p. 460; Griffith, Ic. Pl. Asiat. t. 645.

Insula Amami-Ōshima (*Doederlein* ex *Engler*, et ex *Tashiro*).

Insula Utchinâ: in tractu Kundjan (*Tashiro*! April. 1887, steril.); in lacibus Kesadji et Finoko (*Matsumura*! Majo 1887, fl. et frf.).

Insula Kumi, ex *Tashiro*.

Archipelago Yêma: insula Ishigatchi, ex *Tashiro*; insula Irumuti in Hibundaki ad pagum Funauki (*S. Tanaka*! n. 342, 10 Junio 1891), et ad pagum Fushitati (*T. Itō*, n. 1427, 13 Aug. 1894, fl. et frf.), et in ripis fluminis Nakara-gâ (*T. Itō*, n. 1423, 12 Aug. 1894, fl.).

Nom. Lutch.: Bigi Piniiki (Y.) sec. *T. Itō*; Otoko Hirugi (Ō.) sec. *Tashiro*.

Distrib. Formosa (*Ōwatari*! 1896), India, Ceylon, Africa, Australia and Polynesia, in maritime districts.

COMBRETACEÆ.

Terminalia, L.

* **T. Catappa**, L. Mant. II, p. 519; Willd. Sp. Pl. IV, p. 967; Roxb. "Hort. Beng. p. 33," et Fl. Ind. II, p. 430; Lam. Illustr. t. 848; DC. Prodr. III, p. 11; Wight et Arn. Prodr. Fl. Pen. Ind. Or, I, p. 313; Wight, Ic. Pl. Ind. Or. t. 172; Hook. et Arn. Bot. Beech. Voy. p. 263; Torr. et Gray, Fl. N. Am. I, p. 485; Chapman, Fl. S. Un. St. p. 137; Bot. Mag. t.

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3004; Miq. Fl. Ind. Bat. I, pt. 1, p. 599; Kurz, For. Fl. Brit. Burm. I, p. 454; Clarke, in Hook, f. Fl. Brit. Ind. II, p. 444; Maxim. in Mél. Biol. XII (1886) p. 459; Henry, List Pl. Formos. p. 43; King, in Journ. As. Soc. Beng. LXVI, pt. 2 (1897) p. 331.

T. intermedia, Spreng. "Syst. II, p. 359."

T. moluccana, Lam. Encycl. I, p. 349; DC. Prodr. III, p. 11.

I. Myrobalana, Roth, Nov. Sp. p. 378.

I. subcostata, Willd. Sp. Pl. IV, p. 978.

Badamia Commersoni, Gaertn. "Fruct. II, p. 97."

Catappa domestica, litorea et *sylvestris*, Rumph. "Herb. Amboin. I, t. 68."

Junglans Catappa, Lour. Fl. Cochinch. p. 703.

LÛTCHÛ (*Tashiro*! sine loc. et init., folia tantum).

INSULA MYÂKU (*T. Itō*, n. 1163, 9 Aug. 1894): ad pagum Firara (*S. Tanaka*! n. 252, 5 Julio 1891, fl.).

NOM. LUTCH.: Kwa-dei-shyâ (U.) sec. *Tashiro* et *S. Tanaka* in schedula.

DISTRIB. Bonin Islands! Formosa and Malaya; widely cultivated in tropics.

Lumnitzera, Willd.

L. racemosa, Willd.; DC. Prodr. III, p. 22; Wight et Arn. Prodr. Fl. Pen. Ind. Or I, p. 316; Miq. Fl. Ind. Bat. I, pt. 1, p. 606; Brandis, For Fl. Ind. p. 221; Kurz, Fl. Fl. Brit. Burm. I, p. 468; Beddome, Fl. Sylv. Anal. Gen. Pl. XXI; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 452; Henry, List Pl. Formos. p. 43.

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Bruguiera madagascariensis, DC. Prodr. III, p. 23.
Petaloma alternifolia, Roxb. Fl. Ind. II, p. 372.
Pyrranthus albus, Wall. "Cat. n. 4019."

ARCHIPELAGO YÊMA: insula Irumuti ad pagos Fushitati in littoris (*T. Itō*, n. 1453, 13 Aug. 1894, flor. et fructif.), et Sunai (S. Tanaka! n. 358, 15 et 19 Junio 1891, flor.).

NOM. LUTCH.: Hama-kaniiki (Y.) ex *T. Itō*.

DISTRIB. Formosa, Malaya, India, Ceylon, tropical Africa, Madagascar, N. Australia and Polynesia.

I found this small tree growing among mangroves in the swampy ground along the coast of the island of Irumuti in the Yêma Archipelago. The stem is short and copiously branched. Leaves 2½–5½ cm. long, 1–2 cm. broad, thick, coriaceous, smooth, obovate-cuneate or spathulate, entire, apex obtuse or retuse, sometimes emarginate, subsessile. Racemes axillary, ascending, 8–17 mm. long, few or many-flowered; flowers 10–13 mm. long; calyx-tube oblong, with 2 adnate bracteoles; petals 5, white; stamens 10. Fruits 10–13 cm. long, woody, ovate or elliptic-oblong, fusiform. [T. Itō].

Quisqualis, L.

* **Q. indica**, L. "Sp. Pl. ed. 2, p. 556"; Lour. Fl. Cochinch. p. 336; Lam. Illustr. t. 357; DC. Prodr. III, p. 23; Roxb. Fl. Ind. II, p. 427; "Wight, Illustr. t. 92"; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 318; Miq. Fl. Ind. Bat. I. pt 1, p. 610; Brandis, For. Fl. Ind. p. 220; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 459; Hance, in Journ. Bot. 1879, p. 10; Forbes et Hemsl. Ind. Fl. Sin. I. p. 295; Henry, List Pl. Formos. p. 43; Shitsumon Honzō, Suppl. t. 5.

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Q. ebracteata, Beauv. "Fl. Owar. I. p. 57, t. 35"; DC. Prodr. III, p. 23.

Q. glabra, Burm. "Fl. Ind. p. 104, t. 28, f. 2"; DC. Prodr. III, p. 23.

Q. grandiflora, Miq. in "Journ. de Bot. Néerl. I (1861) p. 119."

Q. longiflora, Presl, "Epimel. Bot. p. 216."

Q. Loureiri, G. Don, Gen. Syst. II, p. 667.

Q. pubescens, Burm. "Fl. Ind. p. 104, t. 35, f. 2."

Q. sinensis, Lindl. "Bot. Regist. n. s. XXX (1844) t. 15."

Q. sp., Griffith, Notul. IV, p. 683.

LÛTCHÛ, cult. sec. *Tashiro* in litt.

NOM. LUTCH.: Shikunshi, ex *Tashiro* in litt.

DISTRIB. China and Malaya; widely cultivated in tropical countries.

MYRTACEÆ.

Psidium, L.

* **P. Guyava**, L. Sp. Pl. ed. 1, p. 470; Benth. Fl. Hongk. p. 120; Griseb. Fl. Brit. W. Ind. Isl. p. 241; Duthie, in Hook, f. Fl. Brit. Ind. II, p. 468; Forbes et Hemsl. Ind. Fl. Sin. I, p. 295, in nota; Hillebrand, Fl. Hawaii. Isl. p. 130; Brandis, For. Fl. Ind. p. 232; Kurz, For. Fl. Brit. Burm. I, p. 476, et in "Journ. As. Soc. Beng. XLVI, pt. 2 (1877) p. 62"; Henry, List Pl. Formos. p. 43; Matsumura, in Bot. Mag. Tōkyō, XII (1898) p. 67; Shitsumon Honzō, Suppl. t. 16.

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Var. pyriferum, Duthie, in Hook. f. Fl. Brit. Ind. II, p. 468.

Guayeva pyriformis, Gærtn. "Fruct. I, t. 38."

Psidium pyriferum, L. "Sp. Pl. ed. 2, p. 672"; Roxb. Fl. Ind. II, p. 480; DC. Prodr. III, p. 233.

LÛTCHÛ (*K. Hirasawa*! 1894, fl., in herb. Normal School, Kagoshima).

INSULA AMAMI-ŌSHIMA, cult? (*T. Itō,* n. 503, 21 Julio 1894, frf.).

INSULA UTCHINÂ: in Nâfa (*S. Tanaka*! n. 241, 11 Majo 1891, steril.) ad Idzunzatchi-mura (*Yamada*! 22 Aug. 1882, steril.) et Ōnu-yama (*T. Itō,* n. 852, 30 Julio 1894, steril.); inter Tchatan et Unna (*T. Itō,* n. 993, 22 Aug. 1894, fl.); in monte Nagu-daki, spontefacta (*T. Itō,* n. 1115, 24 Aug. 1894, frf.); ad Yuntanza (*Matsumura*! 24 April. 1897, fl. sub "flores albi").

INSULA MYÂKU (*T. Itō,* n. 1164, 9 Aug. 1894, fl.).

ARCHIPELAGO YÊMA: insula Kuru-shima (fide *Tashiro*); insula Ishigatchi inter Shika-mura et Nôra (*T. Itō,* n. 1283, 11 Aug. 1894, frf.).

NOM. LUTCH.: Banshirû (U.) sec. *T. Itō*; Bansuru (Y.) sec. *T. Itō*; Banshiro (O.) sec. *T. Itō*.

DISTRIB. Native of America; cultivated and naturalized in subtropical and tropical Asia, including Formosa (*Makino*! *Owatari*! 1896), Hongkong, South China and India. Peduncle 1-flowered, flower white; fruit pyriform, edible.

Rhodomyrtus, Reichb.

R. tomentosa, Hassk. in "Flora, 1842, Beibl. 2, p. 35";

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"Wight, Spicil. Neilgh. I, p. 60, t. 71"; Benth. Fl. Hongk. p. 121; Miq. Fl. Ind. Bat. I, pt. 1, p. 477; Duthie, Hook. f. Fl. Brit. Ind. II, p. 469; Bot. Mag. t. 2802; Forbes et Hemsl. Ind. Fl. Sin. I, p. 295; Matsumura, in Bot. Mag. Tōkyō, XII (1898) p. 68; Henry, List Pl. Formos. p. 43.

Myrtus canescens, Lour. Fl. Cochinch. p. 311.

M. tomentosa, Ait. Hort. Kew, ed 1, II, p. 159; Bot. Mag. t. 250; DC. Prodr. III, p. 240; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 328; Wight, "Illustr. II, p. 12, t. 97*, f. 3," et Ic. Pl. Ind. Or. t. 522; Roxb. Fl. Ind. II, p. 498; "Vahl, Symb. II, p. 56"; Blume, Bijdr. p. 1081.

INSULA UTCHINÂ: in tractu Kundjan (*Tashiro*! April. 1887, fl.); circa Yuntanza inter Tchatan et Unna (*T. Itō*, n. 994, 22 Aug. 1894, frf.); circa Unna (*S. Tanaka*! n. 56, 15 Majo 1891, fl.).

INSULA KUMI, culta (*S. Tanaka*! n. 229, 4 Junio 1891, fl.).

NOM. LUTCH.: Wentchû-nu-mimi (U.) ex *Tashiro*; Wentchu-nu-mi (U.) ex *Matsumura*.

DISTRIB. Formosa (Kelung, *Makino*! 1896), Hongkong, China, the Philippine Islands, Malaya, India and Ceylon.

Eugenia, L.

E. Jambos, L. Sp. Pl. ed. 1, p. 470; Roxb. "Hort. Beng. p. 37," et Fl. Ind. II, p. 494; Wight, "Illustr. II, p. 14"; Brandis, For. Fl. Ind. p. 233; Kurz, in "Journ. As. Soc. Beng. XLVI, pt. 2 (1877) p. 69," et For. Fl. Brit. Burm. I, p. 495; "Beddome, Fl. Sylv. Anal. Gen. CX"; Duthie, in Hook. f. Fl. Brit. Ind. II, p. 474; Forbes et Hemsl. Ind. Fl. Sin. I, p. 297;

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Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) p. 68; Henry, List Pl. Formos p. 43; Shitsumon Honzō, Suppl. t. 7.

Jambosa vulgaris, DC. Prodr. III, p. 286; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 332; Wight, Ic. Pl. Ind. Or. t. 435; Hook. et Arn. Bot. Beech. Voy. p. 188; Benth. Fl. Hongk. p. 120; Bot. Mag. t. 3356; Blume, Mus. Bot. Lugd. Bat. I, p. 93; Miq. Fl. Ind. Bat. I, pt. 1, p. 425.

Myrtus Jambos, H. B. et K. "Nov. Gen. et Sp. VI, p. 144"; Blume, Bijdr. p. 1085.

LÛTCHÛ (*K. Hirasawa*! 1894, steril., in herb. Normal School, Kagoshima).

INSULA TANE-GA-SHIMA (*S. Tanaka*! 1891).

INSULA AMAMI-ŌSHIMA, cult? (*T. Itō*, n. 504, 21 Julio 1894, frf.).

INSULA UTCHINÂ: ad Nâfa in Idzunzatchi-mura (*Yamada*! 1882); in tractu Kundjan, ad Mutubu-madjiri in Nakanu-gawa (*S. Tanaka*! n. 240 A, 18 Majo 1891, fl.), et circa Nagu (*S. Tanaka*! n. 240 B, 17 Majo 1891, steril.); in monte Ubashimata (*Matsumura*! 1897, fl.).

ARCHIPELAGO YÊMA: insula Ishigatchi (*T. Itō*, n. 1284, 11 Aug. 1894, steril.), in monte Suri (*Aragatchi*! n. 1351, Martio 1895, fl.).

NOM. LUTCH.: Fûtō (U.) sec. *T. Itō*; Fûdō (Y.) sec. *T. Itō*.

DISTRIB. Formosa (*Makino*! 1896), Hongkong, South China, India to Australia, but commonly cultivated and naturalized.

E. sinensis, Hemsl. in Forbes et Hemsl. Ind. Fl. Sin. I, p. 298; Matsumura, in Bot. Mag. Tōkyō, XII (1898) p. 64.

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Syllysium buxifolium, Meyen et Schauer, in "Nov. Act. Nat. Cur. XIX, Suppl. I (1843) p. 334."

Syzygium buxifolium, Hook. et Arn. Bot. Beech. Voy. p. 187; Walp. Ann. II, p. 180; Benth. Fl. Hong. p. 118; Maxim. in Mél. Biol. XII (1886) p. 459.

INSULA TANE-GA-SHIMA (*Tashiro* ex *Maximowicz*).

INSULA AMAMI-ŌSHIMA (*Doederlein* ex *Maxim.*, *Tashiro*! Sept. 1887, fl.).

INSULA UTCHINÂ (*Matsumura*! 1897, fl.): in tractu Kundjan (*Tashiro*! Majo 1887, fl.), circa montem Nagu-daki (*S. Tanaka*! n. 168, 20 Majo 1891, fl.); inter Nagu-daki et Kushi (*S. Tanaka*! n. 169, 20 Majo 1891, fl.); in monte Wâsû-yama ad Ufura, Kushi-madjiri (*S. Tanaka*! n. 215, 21 Majo 1891, fl.); circa Unna (*S. Tanaka*! n. 55, 15 Majo 1891, fl.).

ARCHIPELAGO YÊMA: in insula Yunakuni ad montem Urabu-daki (*S. Tanaka*! n. 395, 13 Junio 1891, fl.).

NOM. LUTCH.: Adiku (U.) sec. *Tashiro*.

DISTRIB. Bonin Islands! Formosa (*Makino*! *Owatari*! 1896), Hongkong and China.

Barringtonia, Forst.

B. racemosa, Roxb. "Hort. Beng. p. 52," et Fl. Ind. II, p. 634; DC. Prodr. III, p. 288; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 333; Wight, Ic. Pl. Ind. Or. t. 152; Bot. Mag. t. 3831; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 507; Kurz, For. Fl. Brit. Burm. I, p. 496; Henry, List Pl. Formos. p. 43; Shitsumon Honzō, Suppl. t. 10.

B. alba, Kostel, "Allg. Med.-Pharm. Fl. IV, p. 1536."

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B. rubra, Blume, in "Fl. des Serres, sér. 1, VII (1851–52) p. 23."

Butonia alba, Miers; in Trans. Linn. Soc., ser. 2, Bot. I (1875) p. 65.

But. inclyta, Miers, in Trans. Linn. Soc., ser. 2, Bot. I (1875) p. 71.

But. racemosa, Juss. Gen. p. 326; Miers, in Trans. Linn. Soc., ser. 2, Bot. I (1875) p. 65.

But. rubra, Miers, in Trans. Linn. Soc., ser. 2, Bot. I (1875) p. 70.

Eugenia racemosa, L. Sp. Pl. ed. 1, p. 673.

Stravadium album et *rubrum*, DC. Prodr. III, p. 289.

Insula Amami-Ōshima: in ripâ fluminis, inter Taken et Nishinakama (*T. Itō*, n. 677, 19 Julio 1894, fl.).

Insula Utchinâ: ad Shui (*T. Itō*, n. 791, 24 Julio 1894, fl.).

Insula Myâku, fide *Tashiro*.

Insula Kumi, fide *Tashiro*.

Archipelago Yêma: insula Irumuti, in ostio fluminis Nakaragâ (*T. Itō*, n. 142, 12 Aug. 1894, fl.); insula Ishigatchi in monte Suri (*S. Tanaka*! n. 283, 24 Junio 1891).

Nom. Lutch.: Kiifudji (U.) sec. *T. Itō*; Sagari-bana (O.) sec. Shitsumon Honzō, l.c.

Distrib. Formosa (*Makino*! *Ōwatari*! 1896), Malaya, India and Polynesia.

Observ. B. Speciosa, Forst. The fruit of this widely distributed species, being carried by ocean-currents, are often cast ashore the Lûchû Islands. I myself found one in 1894 on

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the shore of Sutubanari-jima, an uninhabited island among the Yêma Archipelago, situated close to Formosa. Tashiro states that he collected quite a number of specimens of this fruit on the coast of Hatiruma Island, also belonging to the Yêma Archipelago. Henry (List Pl. Formos. p. 43) mentions this species as also found in Formosa. [T. Itō].

MELASTOMACEÆ.

Osbeckia, L.

O. chinensis, L. Sp. Pl. ed. 1, p. 345; Lam. Illustr. t. 283; DC. Prodr. III, p. 141; Lour. Fl. Cochinch. p. 228; Roxb. Fl. Ind. II, p. 224; "Bot. Regist. t. 542"; Bot. Mag. t. 4026; Triana, in Trans. Linn. Soc. XXVIII (1871) p. 53; Blume, Mus. Bot. Lugd. Bat. I, p. 50; Benth. Fl. Hongk. p. 115, et Fl. Austral. III, p. 291; F. Muell. Fragm. Phyt. Austral. IV, p. 160; Miq. Prol. Fl. Jap. p. 150; Franch. et Sav. Enum. Pl. Jap. I, p. 165; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 515: Franch. Pl. David. I, p. 132; Forbes et Hemsl. Ind. Fl. Sin. I, p. 298; Henry, List Pl. Formos. p. 43; Cogn. in A. DC. Monogr. Phanerog. VII, p. 325.

O. angustifolia, D. Don, Prodr. Fl. Nep. p. 221; DC. Prodr. III, p. 142; "Naud. in Ann. Sc. Nat. sér. 3. XIV (1850) p. 59"; Blume, Mus. Bot. Lugd. Bat. I, p. 50.

O. decora, Wall. "Cat. n. 4070."

O. glabrata, Benth. in "Wall. Cat. n. 4071."

O. japonica, Naud. in "Ann. Sc. Nat. sér. 3, XIV (1850) p. 70."

O. linearis, Blume, "Bijdr. Nat. Wet. VI, p. 219,"

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et in "Flora, XIV (1831) p. 473," et Mus. Bot. Lugd. Bat. I, p. 51, f. 19; Miq. Fl. Ind. Bat. I, pt. 1, p. 519; "Naud. in Ann. Sc. Nat. sér. 3, XIII, t. 7, f. 4, XIV, p. 70."

O. myrtifolia, Blume, Mus. Bot. Lugd. Bat. I, p. 51.

O. zeylanica, DC. ex "Naud. in Ann. Soc. Nat. sér. 3, XIV (1850) p. 71 (non L. f.)."

Tristemma angustifolium, Blume, Bijdr. Fl. Ned. Ind. p. 1079; DC. Prodr. III, p. 144.

INSULA UTCHINÂ (*Tashiro*! Aug. 1887, fl. cum fruct.).

DISTRIB. Japan, Formosa, Hongkong, China, India, Malaya (including the Philippine Islands) and Australia.

Melastoma, Burm. ex L.

M. candidum, D. Don, in "Mem. Wern. Soc. IV (1823) p. 288"; DC. Prodr. III, p. 145; "Benth. in Hook. Kew Journ. Bot. IV, p. 116"; Triana, in Trans. Linn. Soc. XXVIII (1871) p. 60; Forbes et Hemsl. Ind. Fl. Sin. I, p. 299; Cogn. in A. DC. Monogr. Phanerog. VII, p. 347; Henry, List Pl. Formos. p. 43.

M. calycinum, Benth. in "Hook. Lond. Journ. Bot. I (1842) p. 485."

M. macrocarpum, D. Don, in "Mem. Wern. Soc. IV (1823) p. 289"; Franch. et Sav. Enum. Pl. Jap. I, p. 116, in adnot.; Engler, Bot. Jahrb. VI (1885) p. 62 (forma brevifolia).

M. malabathricum, Sims, Bot. Mag. t. 529, excl. syn.; "Bot. Regist. t. 672"; Hook. et Arn. Bot. Beech. Voy. p. 186 (non L.).

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M. Nobotan, Blume, Mus. Bot. Lugd. Bat. I, p. 547.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsl.*, *H. Nakagawa*! fl., *K. Hirasawa*! 1894, flor., in herb. Normal School, Kagoshima).

INSULA AMAMI-ŌSHIMA : ad Nazé (*Yamada*! 1882, frf.); inter Nazé et Yamatohama (*T. Itō*, n. 565, 16 Julio 1894, fl. et frf.); ad Miyamantō inter Yamatohama et Taken (*T. Itō*, n. 610, 17 Julio 1894, fl. et frf.); inter Nishinakama et Nazé (*T. Itō*, n. 725, 20 Julio 1894, fl. cum fruct.).

INSULA UTCHINÂ (*Tashiro*! Majo 1887, fl. cum fruct.): inter Tchatan et Unna (*T. Itō*, n. 995, 22 Aug. 1894, frf.); inter Yuntanza et Unna (*S. Tanaka*! n. 57, 15 Majo 1891, fl.); ad Yuntanza in collibus (*Matsumura*! April. 1897, fl.); in tractu Kundjan in montibus Unna-daki (*T. Itō*, n. 1068, 23 Aug. 1894, frf.); circa Nagu (*S. Tanaka*! n. 81, 17 Majo 1891, fl.); ad montem Nagu-daki (*T. Itō*, n. 116, 22 Aug. 1894, flor. et fructif., et *forma macrophylla*, T. Itō, n. 1117, 22 Aug. 1894, frf.).

ARCHIPELAGO YÊMA : ab insula Kuru-shima ad insula Hatiruma (fide *Tashiro*); insula Ishigatchi (*T. Itō*, n. 1286, 11 Aug. 1894, frf.); insula Utchibanari (*T. Itō*, n. 1486, 12 Aug. 1894, frf.); insula Irumuti ad pagum Sunaimura (*T. Itō*, n. 1430, 12 Aug. 1894, steril., *forma macrophylla*, T. Itō, foliis late ovato-oblongis, 5–6 poll. long.).

NOM. LUTCH.: Mara Hankâ (Y.) fide *Tashiro* et *T. Itō*.

DISTRIB. Formosa (*Makino*! *Ōwatari*! 1896, *Honda*!), Hongkong and China.

The forms of the leaves vary from lanceolate to broadly ovate-oblong, and their length from 2 to 6 inches.

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Bredia, Blume.

B. hirsuta, Blume, Mus. Bot. Lugd. Bat. I, p. 25, f. 4 (1849); Franch. et Sav. Enum. Pl. Jap. I, p. 166, in adnot., II, p. 369; "Naud. in Ann. Sc. Nat. sér. 3, XV (1850) p. 284, t. 12, f. 2"; Regel, Gartenflora, 70, p. 193, t. 655; Bot. Mag. t. 6447; Engler, Bot. Jahrb. VI (1885) p. 62; Cogn. in A. DC. Monogr. Phanerog. VII (1891) p. 473; Makino, in Bot. Mag. Tōkyō, X (1886) p. 58.

Rhexia Fashikan, Sieb. ex Blume, Mus. Bot. Lugd. Bat. I, p. 25 (1849).

LÛTCHÛ (*H. Nakagawa*! n. 164 et n. 177, fl., *K. Hirasawa*! 1894, fl., in Herb. Normal School, Kagoshima).

INSULA AMAMI-ŌSHIMA: in montanis ad pagum Yuwan-mura (*S. Tanaka*! n. 459, 12 Aug. 1891, fl.); ad Miyamantō inter Yamatohama et Taken (*T. Itō*, n. 611, 17 Julio 1894); inter Taken et Nishinakama (*T. Itō*, n. 678, Julio 1894, fl.); inter Nishinakama et Nazé (*T. Itō*, n. 726, 20 Julio 1894, fl.). Spontanea.

INSULA UTCHINÂ (*Tashiro*! Maio 1887, fl.): in tractu Kundjan in montibus Unna-daki (*T. Itō*, n. 1069, 23 Aug. 1894, fl.) et Nagu-daki (*T. Itō*, n. 1118, 24 Aug. 1894, fl.). Spontanea.

ARCHIPELAGO YÊMA: insula Irumuti ad pagum Sunai-mura (*T. Itō*, n. 1429, 13 Aug. 1894, fl.). Spontanea.

DISTRIB. An endemic species; only cultivated in gardens in Japan.

A closely allied species, or only a variety (*B. scandens*, nobis), with scandent hirsute stem, and less hairy, ovate-cordate

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leaves; with white, elliptical, acute petals; and with 4 short (anthers yellow) and 4 long (anthers bright violet) stamens, occurs in Formosa (*Ōwatari*! Jan. 1896, flor.). *B. Oldhami*, Hook. f. Ic. Pl. XI, p. 68, t. 1085, also from Formosa (Hoosoang and Kachinlo, *Ōwatari*!), is a glabrous species, with smaller lanceolate, 5-nerved leaves.

Blastus, Lour.

B. cochinchinensis, Lour. Fl. Cochinch. p. 527 (1790); Seemann, in Journ. Bot. I (1863) p. 28; Hance, in Journ. Linn. Soc. XIII (1872) p. 103; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 528; Forbes et Hemsl. Ind. Fl. Sin. I, p. 301; Cogn. in A. DC. Monogr. Phanerog. VII (1891) p. 476; Henry, List Pl. Formos. p. 44.

B. parviflorus, Triana, in Trans. Linn. Soc. XXVIII (1871) p. 74, t. 6, f. 65; Baillon, Hist. des Pl. VII, p. 13, f. 20; Engler, Bot. Jahrb. VI (1885) p. 62.

Amplectrum parviflorum, Benth. Fl. Hongk. p. 116 (1861).

Insula Amami-Ōshima (*Doederlein* sec. *Engler*): in montanis ad pagum Yuwan-mura (*S. Tanaka*! n. 460, 12 Aug. 1891, fl.); inter Nazé et Yamatohama (*T. Itō*, n. 565, 16 Julio 1894, fl.); inter Yamatohama et Taken (*T. Itō*, n. 612, 17 Julio 1894, fl.); inter Nishinakama et Nazé (*T. Itō*, n. 727, 20 Julio 1894, fl.).

Insula Utchinâ: in montanis ad Kundjan-madjiri (*Tashiro*! Majo 1887, fl.).

Distrib. Formosa (*Ōwatari*! 1896), Hongkong, Southern China, Cochinchina and India.

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Tashiroea *Matsumura* gen. nov.[1]

Flores 4-meri. Calycis glaberrimi tubus turbinato-campanulatus, 4-gonus; 4-lobatus, lobis late triangularibus retusis vel cuspidatis, dorso alatis. Petala 4, elliptica vel ovalia, glabra, interdum unguiculata, aestivatione contorta. Stamina 8, subaequalia, conformia, filamentis filiformibus, planis; antherae lineari-subulatae, apice minute 1-porosae, loculis haud undulatis, connectivo basi non producto, antice biauriculato, postice tuberculato. Ovarium fundo calycis adnatum, 4-loculare, vertice glaberrimum late exsculptum, marginibus angulatis; stylus filiformis, suberectus, stigmate punctiforme. Capsula ovoideo-obconica, calyce coriaceo alato inclusa, vertice loculicide 4-valvis, exsculpta. Semina recta, clavata, aspera, hilo basilari.

Fruticuli, caule lignoso ramoso, ramis lignosis. Folia opposita longe petiolata oblonga denticulata, 3-nervia, subtus discoloria, petiolis intus furfuraceis. Flores rosei, majusculi, cymoso-umbellati. Pedicelli articulati.

Genus ex tribus Sonerileae[2] [3] vel Cassebericae[4] juxta *Phyllagathidem* Bl. collocandum, differt calycis lobis persistentibus dorso non setosis, antheris basi non discretis, connectivo antice biauriculato, postice tuberculato, stylo erecto.

A *Barthea*, Hook. f. differt antheris conformibus, connectivo antice non bisetoso, ovario vertice glabro, pedicellis basi nudis.

Tashiroea yaeyamensis *Matsumura.*

Caulis lignosus teres brunneus ramosus, nodiis tumidis; foliis ampliis in sicco nigrescentibus longe petiolatis oblongis vel

1) Auctore J. MATSUMURA.
2) Benth. et Hook. Gen. Pl. vol. I, p. 753.
3) Cogniaux in A. et C. de Candolle, vol. VII. p. 489.
4) Melastomaceae von Frid. Krasser in Engl. et Prant. Natürl. Pflanzenf. p. 174.

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obovato-oblongis acuminatis basi rotundatis plicatis 3-nerviis denticulatis, lamelloso-marginatis, supra sub lente albo-punctulatis subtus discoribus glabris, laminis in petiolas subdecurrentibus, nerviis lateralibus cir. 16 subpatentibus; floribus terminalibus in cymas glabrescentes dispositis, pedicellis articulatis, articulis furfuraceis bibracteatis, bracteis subulatis; calyce subfurfuraceo, lobis brevissimis.

Speciminibus nostris partes inferiores desunt. Caules supp. 200 mm. longi. Folia supp. maxima 223 mm. longa, 55 mm. lata. Cymae 40-80 mm. latae, 40-50 mm. longae. Pedicelli fruct. 7-8 mm. longi, subarcuati. Flores circiter 20 mm. diametro. Petala 10 mm. longa, 8-9 mm. lata. Stamina longiora 19 mm. longa; breviora 13 mm. longa, glabra; antherae stam. brev. 8 mm. longae, subsigmoideo-recurvae; stam. long. 10-12 mm. longae. Stylus 18 mm. longus. Capsula subcarnosa, 5 mm. longa et lata, usque medium dehiscens, valvis dorso sulcatis.

Hab. in Yaeyama, legit Y. Tashiro mense Augusto anno 1887; Iriomote (*S. Tanaka* no. 345) anno 1890.

var. **Tanakaea** *Matsumura.*

Foliis in sicco brunneis longe petiolatis obovato-ellipticis acutiusculis; floribus pedicellatis, roseis, in cymas terminales paucifloras dispositis, calyce fruct. sursum alato. A typo differt foliis brevioribus et obtusioribus.

Folia 100 mm. longa, 40 mm. lata. Petioli 15 mm. longi.

Hab. insula Iriomote archipelagi Yaeyama, legit S. Tanaka mense Julio anno 1890, no. 344.

Tashiroea okinawensis *Matsumura.*

Caulibus lignosis, brunneis glabris ramosis, ramis subteragonis junioribus rufo-furfuraceis foliis longe petiolatis oblongo-lanceolatis, utrinque acutis denticulatis, 3-nerviis, supra glabris, lamello-marginatis subfurfuraceis demum glabrescentibus, subtus glabris subfurfuraceo-punctulatis discoribus interdum purpurascentibus; floribus solitariis vel pauci-cymosis, subfurfuraceis,

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pedicellis articulatis, calyce subfurfuraceo demum glabrescente, fruct. non alatis pedicellis valvisque sub lente ciliis nigris vestitis.

Specimina supp. 189-400 mm. alta. Pedicelli 4-6 mm. longi. Petala 12 mm. longa 7 mm. lata, interdum subunguiculata, glabra.

A praecedente differt foliis parvioribus, nerviis lateralibus non conspicuis floribus paucioribus calyce fruct. et capsulis ciliolatis.

Hab. in montosis tractus Kunchan ins. Okinawa legit Y. Tashiro mense Aprili anno 1887; juxta Ōura ejusdem insulæ (*S. Tanaka*, no. 216); eadem insula (*J. Matsumura*).

LYTHRACÆ.

Rotala, L. (sensu ampl. ex Koehne.).

R. leptopetala, Koehne, in Engler, Bot. Jahrb. I (1881) p. 162.

Ammania baccifera, Roth, "Sp. Nov. Pl. Ind. p. 100 (1821), non L."

A. leptopetala, Blume, Mus. Bot. Lugd. Bat. II, p. 134 (1852); Walp. Ann. IV, p. 687.

A. pentandra, Blume, Bijdr. Fl. Ned. Ind. p. 1130, pro parte; DC. Prodr. III, p. 79 (non L.), fide Blume.

Tritheca pentandra, Miq. Fl. Ind. Bat. I, pt. 1, p. 1089, pro parte (1855).

Insula Utchinâ (*H. Nakagawa*! frf.): in tractu Kundjan ad pedem monte Nagu-daki (*T. Itō*, n. 1119, 24 Aug. 1894, fl. et frf.); inter Unna et Nagu (*T. Itō*, n. 1070, 23 Aug. 1894).

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DISTRIB. Japan, China, India, Ceylon and Malaya (including the Philippine Islands).

In Luchuan specimens, the flowers are 3-merous, and agree with *R. leptopetala*, Subs. 1. *leptopetala* var. *β littorea*, Koehne, in Engler, Bot. Jahrb. I (1881) p. 163. *R. leptopetala*, Koehne is distinguished from *R. densiflora*, Koehne (Ammania densiflora, Roth; A. pentandra, Roxb.; Rotala Roxburghiana, Wight, Ic. Pl. Ind. Or. t. 260 B) by narrow acute petals, which are not obovate or rotundate as in the latter species.

R. indica, Koehne, in Engler, Bot. Jahrb. I (1881) p. 172.

Amelitia acutidens, Miq. Fl. Ind. Bat. I, p. 617 (1855).

Amel. elongata, Blume, Mus. Bot. Lugd. Bat. II, p. 135 (1852); Walp. Ann. IV, p. 686.

Amel. indica, DC. in "Mém. Soc. Genev. III, 2 (1826) pp. 2 et 82, t. 3, f. A," et Prodr. III, p. 76; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 303; Wight, Ic. Pl. Ind. Or. t. 257, f. A, et "Illustr. I, t. 206"; Blume, Mus. Bot. Lugd. Bat. II, p. 135, t. 47; Ledeb. Fl. Ross. II, p. 125.

Ammania peploides, Spreng. "Syst. I, p. 444 (1825)"; Boiss. Fl. Orient. II, p. 742; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 566; Franch. et Sav. Enum. Pl. Jap. I, p. 166; Forbes et Hemsl. Ind. Fl. Sin. I, p. 303; Henry, List Pl. Formos. p. 44.

Amm. polystachya, Wall. "Cat. n. 2094 a et b, nec c (1828); Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 304.

Amm. repens, Rottl. ex "Mart. in Acad. Muench. Phil.

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VI (1820) p. 150"; DC. Prodr. III, p. 80; Hance, in Journ. Bot. 1878, p. 227.

Peplis indica, Willd. Sp. Pl. II, p. 244.

Var. uliginosa, Koehne, in Engler, Bot. Jahrb. I (1881) p. 173.

Ameletia uliginosa, Miq. Prol. Fl. Jap. p. 149 (1865-66).

INSULA UTCHINÂ (*Tashiro*! Aug. 1887, fl.).

DISTRIB. Extends from Japan, Formosa (*Makino*! 1896), Malaya (including the Philippine Islands), and India, to Persia.

Pemphis, Forst.

P. acidula, Forst. "Char. Gen. p. 67, t. 34 (1776)"; DC. Prodr. III, p. 89; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 307; Blume, Mus. Bot. Lugd. Bat. II, p. 128, t. 43; Miq. Fl. Ind. Bat. I, pt. I, p. 619; Griffith, Notul. IV, p. 510; Benth. Fl. Austral. III, p. 300; Hiern, in Oliver, Fl. Trop. Afr. II, p. 482; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 573; Kurz, For. Fl. Brit. Burm. I, p. 518; Koehne, in Engler, Bot. Jahrb. III (1882) p. 133; Hemsl. Bot. Voy. 'Challenger,' I, 3, p. 153; Baillon, Hist. des Pl. VI, p. 436, figg. 410 et 411; Forbes et Hemsl. Ind. Fl. Sin. I, p. 305; Henry, List Pl. Formos. p. 44.

P. angustifolia, Roxb. "Hort. Beng. p. 91 (1814)," et Fl. Ind. II, p. 465.

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P. setosa, Blanco, Fl. Filip. ed 1, p. 410 (1837).

Lythrum Pemphis, L. f. Suppl. p. 249 (1781); Willd. Sp. Pl. II, pt. 2, p. 867; Lam. Encycl. VI, p. 457, et Illustr. II, p. 408, f. 2.

Maclellandia Griffithiana, Wight, Ic. Pl. Ind. Or. t. 1996 (1853).

Melanium fruticosum, Spreng. "Syst. II, p. 455 (1825)."

Millania rupestris, Zipp. ex Blume, Mus. Bot. Lugd. Bat. II, p. 128 (1852 [1856]).

ARCHIPELAGO YÊMA: in insula Ishigatchi ad pagum Kabira-mura (*S. Tanaka*! n. 302, 27 Junio 1891, fl. et frf.).

DISTRIB. Widely spread over the seacoasts of Formosa, Malaya (including the Philippine Islands), India, Ceylon, East Africa, the Mascarene Islands, Madagascar, North-east Australia and Polynesia.

OBSERV. *Lawsonia inermis*, L. is found in Formosa (Shinchiku, *Makino*! 1896).

Lagerstrœmia, L.

L. indica, L. "Syst. ed. 10, p. 1076 (1859)," et "Sp. Pl. ed. 2, p. 734 (1762)"; Willd. Sp. Pl. II, pt. 2, p. 118; Thunb. Fl. Jap. p. 224; Lour. Fl. Cochinch. p. 340; DC. Prodr. III, p. 93; Roxb. "Hort. Beng. p. 38," et Fl. Ind. II. p. 505; Bot. Mag. t. 405; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 308; "Wight, Illustr. t. 86"; Blume, Mus. Bot. Lugd. Bat. II, p. 125; "Blanco, Fl. Filip. ed. 2, p. 316"; Miq. Fl. Ind. Bat. I, pt. 1, p. 622; Benth. Fl. Hongk. p. 112; F. Muell. Fragm. Phyt. Austral. VIII, p. 35; Kurz,

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For. Fl. Brit. Burm. I, p. 521; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 575; Miq. Prol. Fl. Jap. p. 148; Franch. et Sav. Enum. Pl. Jap. I, p. 167; Hance, in Journ. Bot. 1879, p. 11; Koehne, in Engler, Bot. Jahrb. IV (1883) p. 19; Franch. Pl. David. I, p. 133; Forbes et Hemsl. Ind. Fl. Sin. I, p. 306; Makino, in Bot. Mag. Tōkyō, X (1896) p. 64 (var. latifolia, Koehne).

L. chinensis, Lam. Encycl. III, p. 375 (1789).

L. speciosa, DC. Prodr. III, p. 93 (1828) non Pers., fide Koehne.

Insula Utchinâ: ad Shui (*Kuroiwa* ex *Makino*).

Distrib. China, Malaya (including the Philippine Islands) and North Australia; cultivated throughout the warm parts of Japan, China, India, Southern Europe and North Australia.

L. subcostata, Koehne, in Engler, Bot. Jahrb. IV (1883) p. 20; Henry, List Pl. Formos. p. 14.

Var. hirtella, Koehne, loc. cit.; Maxim. in Mél. Biol. XII (1886) p. 460; Forbes et Hemsl. Ind. Fl. Sin. I, p. 306.

L. microcarpa, Hance, in Journ. Bot. 1878, p. 107 (non Wight) fide Forbes et Hemsl. l.c.

Insula Tane-ga-shima, sec. *Tashiro*.

Insula Amami-Ōshima: in montibus (*Tashiro*! sept. 1887, flor.) arbor magna, petalis albis et roseis (*Tashiro* fructif. sec. *Maximowicz*); ad Miyamantō inter Yamatohama et Taken (*T. Itō*, n. 613, 17 Julio 1894, flor.).

Nom. Lutch.: Akabura (Ō.) sec. *Tashiro*.

Distrib. Formosa (Kelung, *Makino*! *Ōwatari*! 1896) and South China.

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Sonneratia, L. f.

S. alba, Smith, in "Rees, Cycl. XXXIII, n. 2"; DC. Prodr. III, p. 231; Blume, Mus. Bot. Lugd. Bat. I, p. 338; Miq. Fl. Ind. Bat. I, pt. 1, p. 497; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 580; Kurz, For. Fl. Brit. Burm. I, p. 526; Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) p. 67.

S. acida, Benth. Fl. Austral. III, p. 301; Hiern, in Oliver, Fl. Trop. Afr. II, p. 483 (non L.).

S. mossambicensis, Klotzsch, in "Peters, Reise Mossamb. Bot. p. 66, t. 12."

Blatti alba, O. Kuntze, ex Niedenzu, in Engler et Prantl, Nat. Pflanzenfam. III, pt. 7, p. 21 (1892).

ARCHIPELAGO YÊMA: insula Irumuti inter Nakama et Fêmi (*S. Tanaka*! n. 343, 22 Junio 1891, fl., sub flores albi).

NOM. LUTCH.: Maya-pusiki (Y.) fide *S. Tanaka.*

DISTRIB. Seashores of Malaya, India, tropical Africa, the Sunda Islands and Australia.

Punica, [Tourn.] L.

* **P. Granatum,** L. Sp. Pl. ed. 1, p. 472; Willd. Sp. Pl. II, p. 981; Thunb. Fl. Jap. p. 199; Lour. Fl. Cochinch. p. 313; DC. Prodr. III, p. 3; Bot. Mag. t. 1882 A et B; Roxb. "Hort. Beng. p. 38," et Fl. Ind. II, p. 409; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, 2 (1845) p. 132 (var. frutescens); "Wight, Illustr. Ind. Bot. t. 97"; Hook. et

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Arn. Bot. Beech. Voy. p. 263; Miq. Prol. Fl. Jap. pp. 352 et 368; Franch. et Sav. Enum. Pl. Jap. I, p. 167, in adnot.; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 581; Alph. DC. Orig. Pl. Cult. p. 189; Nyman, Conspect. Fl. Europ. p. 245; Forbes et Hemsl. Ind. Fl. Sin. I, p. 306; Henry, List Pl. Formos. p. 44.

P. nana, L. "Sp. Pl. ed. 2, p. 676"; Willd. Sp. Pl. II, p. 981; DC. Prodr. III, p. 4; Bot. Mag. t. 634.

LÛTCHÛ, sec. *Hook.* et *Arnott.* Cult.

INSULA UTCHINÂ: in oppido Nâfa ad pagum Idsunzatchi-mura (*Yamada*! 1882, steril.). Cult.

INSULA IRABU, adjectis insulis Myâku, cult., fide *T. Itō.*

NOM. LUTCH.: Djakura (U. et Y.) fide *T. Itō.*

DISTRIB. Supposed to be indigenous in Cabûl and Persia; widely cultivated in Japan, Formosa, China, India, Malaya, and in the warmer regions of Europe, Africa and America.

Prof. Bayley Balfour made the interesting discovery, in Socotra, of a curious form, to which he gave the name of *P. protopunica*, and of which he suggests may be the primitive state of the cultivated race.

ONAGRARIEÆ.

Jussieua, L.

J. repens, L. Sp. Pl. ed. 1, p. 388, et Mant. p. 381; Willd. Sp. Pl. II, p. 574; DC. Prodr. III, p. 54; Buch.-Hamilt. in Trans. Linn. Soc. XIV (1824) p. 305; Roxb. "Hort. Beng. p. 33," et Fl. Ind. II, p. 401; "Hook. Bot. Misc. III

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(1833) p. 300, t. 40"; Torr. et Gray, Fl. N. Am. I, p. 520; A. Gray, Man. Bot. N. Un. St. p. 180; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 336; Miq. Fl. Ind. Bat. I, pt. 1, p. 628; Boiss. Fl. Orient. II, p. 751; Benth. Fl. Austral. III, p. 306; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 587; Franch. et Sav. Enum. Pl. Jap. I, p. 169; Hance, in Journ. Bot. 1880, p. 261; Forbes et Hemsl. Ind. Fl. Sin. I, p. 309; Henry, List Pl. Formos. p. 44.

J. alternifolia, E. Mey. ex "Peters, Reise Mossamb. Bot. p. 69."

J. floribunda, Griffith, Notul. IV, p. 688.

J. fluitans, Hochst. in "Flora, XXVII (1844) p. 425"; Harv. et Sond. Fl. Cap. II, p. 504.

J. fluviatilis, Blume, Bijdr. p. 1132.

J. Swartziana, DC. Prodr. III, p. 54.

Cubospermum palustre, Lour. Fl. Cochinch. p. 275.

ARCHIPELAGO YÊMA : insula Ishigatchi ad pagum Nagura-mura (*T. Itō*, n. 1271, 11 Aug. 1894, flor.).

DISTRIB. Japan, Formosa (Kelung and Daihoku, *Makino*! 1896), China, Malaya, India, Ceylon, Africa, America and Australia.

J. suffruticosa, L. Sp. Pl. ed. 1, p. 388; Willd. Sp. Pl. II, p. 576; DC. Prodr. III, p. 58; Miq. Fl. Ind. Bat. I, pt. 1, p. 628; Griseb. Fl. W. Ind. Isl. p. 273; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 587; Forbes et Hemsl. Ind. Fl. Sin. I, p. 309; Henry, List Pl. Formos. p. 44.

J. angustifolia, Lam. Encycl. III, p. 331, et Illustr. t. 280, f. 3; DC. Prodr. III, p. 55; Miq. Fl. Ind. Bat. I, pt. 1, p. 627.

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J. Burmanni, DC. Prodr. III, p. 57.

J. decumbens, Benth. ex "Wall. Cat. 6332."

J. exaltata, Roxb. "Hort. Beng. p. 33," et Fl. Ind. II, p. 401.

J. fruticosa, DC. Prodr. III, p. 57.

J. longipes, Griffith, Notul. IV, p. 689.

J. octofila, DC. Prodr. III, p. 57.

J. octovalvis, Swartz, "Obs. Bot. p. 142."

J. scabra, Willd. "Enum. Hort. Berol. I, p. 449"; DC. Prodr. III, p. 57.

J. villosa, Lam. Encycl. III, p. 331; DC. Prodr. III, p. 57; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 336; Benth. Fl. Hongk. p. 109; Oliver, Fl. Trop. Afr. II, p. 489; Hillebrand, Fl. Hawaii. Isl. p. 132.

Epilobium fruticosum, Lour. Fl. Cochinch. p. 226.

LÛTCHÛ (*Wright* sec. *Forbes* et *Hemsley*, *H. Nakagawa*! n. 170, flor.).

INSULA AMAMI-ŌSHIMA (*Tashiro*! Sept. 1887, fl.).

INSULA UTCHINÂ (*Tashiro*! April. 1887, flor. cum fruct.): ad pedem montibus Nagu-daki (*T. Itō*, n. 1120, 24 Aug. 1894, flor. cum fruct.) et Unna-daki (*T. Itō*, n. 1071, 23 Aug. 1894, flor. cum fruct.).

ARCHIPELAGO YÊMA (*Tashiro*! Aug. 1887, frf.): insula Ishigatchi ad pagum Nagura-mura (*T. Itō*, n. 1287, 11 Aug. 1894, fl. et frf.).

DISTRIB. Formosa (Kelung, *Makino*! *Ōwatari*! 1896), Hongkong, China, Malaya, India, Ceylon, Africa, tropical America, Australia and Polynesia.

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Ludwigia, L.

L. prostrata, Roxb. "Hort. Beng. p. 11," et Fl. Ind. II, p. 420; DC. Prodr. III, p. 59; Wight, Ic. Pl. Ind. Or. t. 762; Clarke, in Hook. f. Fl. Brit. Ind. p. 588; Harv. et Sond. Fl. Cap. I, p. 491; Franch. et Sav. Enum. Pl. Jap. I, p. 169; "Franch. in Mém. Soc. Bot. Cherbourg, XXIV, p. 220"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 309; Henry, List Pl. Formos. p. 45.

L. abyssinica, A. Rich. "Tent. Fl. Abyss. I, p. 274."

L. diffusa, Buch.-Hamilt. in Trans. Linn. Soc. XIV (1824) p. 301; DC. Prodr. III, p. 59.

L. fruticulosa, Blume, Bijdr. p. 1133; DC. Prodr. III, p. 59.

Nematopyxis fruticulosa, Miq. Fl. Ind. Bat. I, pt. 1, p. 630.

N. japonica, Miq. Prol. Fl. Jap. p. 259.

N. prostrata, Miq. Fl. Ind. Bat. I, pt. 1, p. 630.

N. pusilla, Miq. Fl. Ind. Bat. I, pt. 1, p. 630.

LÛTCHÛ (*H. Nakagawa*! n. 167, fl.).

INSULA UTCHINÂ: in tractu Kundjan ad pedem monte Nagu-daki (*T. Itō,* n. 1121, 24 Aug. 1894, fl. et frf.).

ARCHIPELAGO YÊMA: insula Ishigatchi ad pagum Nagu-ra-mura (*T. Itō,* n. 1288, 11 Aug. 1894, fl.).

DISTRIB. Japan, Formosa (Daihoku, *Makino*! 1896), Hongkong, China, Malaya, India, Ceylon, tropical Africa and the Mascarene Islands.

Circæa, Tourn. ex L.

C. quadrisulcata, Franch. et Sav. Enum. Pl. Jap. I, p. 169.

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C. lutetiana var. quadrisulcata, Maxim. Primit. Fl. Amur. p. 106.

LÛTCHÛ, sec. *Tashiro* in MS.

DISTRIB. Japan. An allied species, *C. lutetiana,* L., is very widely spread in north temperate regions. Maximowicz formerly described *C. quadrisulcata,* as a variety of *C. lutetiana,* L.

PASSIFLOREÆ.

Passiflora, L.

* **P. cærulea,** L. Sp. Pl. ed. 1, p. 959, et Amœn. Akad. I, p. 231, t. 10, f. 20; Bot. Mag. t. 28; DC. Prodr. III, p. 330; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 168; Miq. Prol. Fl. Jap. p. 264; Franch. et Sav. Enum. Pl. Jap. I, p. 171, in adnot.; Forbes et Hemsl. Ind. Fl. Sin. I, p. 312, in adnot.

LÛTCHÛ, cult., sec. *Tashiro* in MS.

NOM. LUTCH.: Boron-kadsura (Y.) fide *Tashiro* in MS.

DISTRIB. Native of Brazil. A common garden plant, and cultivated in Japan, Formosa and China, and, according to Forbes and Hemsley, naturalized in Hongkong.

Carica, L.

* **C. Papaya,** L. Sp. Pl. ed. 1, p. 1036; Willd. Sp. Pl. II, p. 1466; "Bot. Regist. t. 459 (♀)"; Bot. Mag. tt. 2898 (♂) et 2899 (♀); "Wight, Illustr. tt. 106 et 107"; Grisebach, Fl. Brit. W. Ind. Isl. p. 290; Henry, List Pl. Formos. p. 45.

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Papaya Carica, Gærtn. "Fruct. II, t. 122."

P. vulgaris, DC. in Lam. Encycl. V, p. 2, et Illustr. t. 821; Alph. DC. in DC. Prodr. XV, pt. 1, p. 414.

INSULA AMAMI-ŌSHIMA: ad Nazé, cult. (*T. Itō*, 21 Julio 1894, fruct.).

INSULA UTCHINÂ: in oppidum Shui, cult. (ex *T. Itō*); as Ufugimi (*Matsumura*! 1897, fl. ♂).

INSULA MYÂKU, cult. (*T. Itō*, n. 1165, 9 Aug. 1894, fl. ♂ et ♀).

NOM. LUTCH.: Banshō-in (U.) ex *T. Itō*.

DISTRIB. Native of tropical America, and very widely cultivated in tropical countries of the both hemispheres. Also cultivated in Formosa (*Makino*! 1896, "cultivated"), but not in Japan.

CUCURBITACEÆ.

Trichosanthes, L.

* ? **T. Auguina**, L. Sp. Pl. ed. 1, p. 1008; Lam. Encycl. I, p. 190, et Illustr. III, p. 375, t. 794; Lour. Fl. Cochinch. p. 588; Willd. Sp. Pl. IV, p. 598; Blume, Bijdr. p. 933; Bot. Mag. t. 722; Seringe, in DC. Prodr. III, p. 314; Roxb. Fl. Ind. III, p. 701; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 350; Miq. Fl. Ind. Bat. I, pt. 1, p. 677; "Naud. in Ann. Sc. Nat. ser. 4, XVIII (1862) p. 91"; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 610; Cogn. in DC. Monogr. Phanerog. III, p. 359; Forbes et Hemsl. Ind. Fl. Sin. I, p. 312.

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Anguina sinensis, etc., Mich. "Gen. p. 12, t. 9."

Cucumis Anguinis, L. "Sp. Pl. ed. 2, p. 1437"; Willd. Sp. Pl. IV, p. 615.

Cucurbita sinensis, etc., Till. "Pis. p. 49, t. 22."

Involucraria Anguina, M. Rœm. "Syn. Pepon. p. 97."

Trichosanthes colubrina, Jacq. f. "Eclog. t. 128."

T. Turolata, Buch.-Hamilt. ex "Wall. Cat. n. 6688 A."

INSULA MYÂKU (*Tashiro*! Julio 1889, steril.). An culta vel spontefacta?

DISTRIB. Native locality uncertain; cultivated in China, Malaya and India. Clarke suggests that it is a cultivated race of *T. cucumerina*, L., a native of India, from which it differs only in the fruit.

As the fruit is deficient, we cannot decide whether Tashiro's specimens belong to this species or to *T. cucumerina*, L.

T. japonica, Regel, "Ind. Sem. Hort. Petrop. 1868 [1869] p. 90"; Maxim. in Gartenfl. 1872, p. 35, t. 714; Franch. et Sav. Enum. Pl. Jap. I, p. 172; Cogn. in DC. Monogr. Phanerog. III, p. 371.

T. cucumerina, Thunb. Fl. Jap. p. 332 (non L.).

Gymnopetalum japonicum, Miq. Prol. Fl. Jap. p. 14.

INSULA AMAMI-ŌSHIMA: inter Taken et Nishinakama (*T. Itō*, n. 680, 19 Julio 1894, fl.).

DISTRIB. Japan.

T. bracteata, Voigt, "Hort. Suburb. Calc. p. 58"; Cogn. in DC. Monogr. Phanerog. III, p. 375.

T. as era, Heyne, in "Herb. Rottl. ex Steud. Nomencl."

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T. asperifolia, Zipp. ex "Spanoghe, in Linnæa, XV, p. 206 (nomen)."

T. Kakidonta, Roxb. ex Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 350.

T. laciniosa, Wight, ex "Wall. Cat. n. 6689 A, B."

T. palmata, Roxb. "Hort. Beng. p. 70," et Fl. Ind. III, p. 704; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 350; "Wight, Illustr. tt. 104 et 105"; Walp. Repert. II, p. 202; Miq. Fl. Ind. Bat. I, pt. 1, p. 678; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 606, excl. syn.

T. pubera, Blume, Bijdr. p. 936; Seringe, in DC. Prodr. III, p. 315.

T. tricuspis, Miq. Fl. Ind. Bat. I, pt. 1, p. 679.

Involucraria cucumerina, M. Rœm. "Syn. Pepon. p. 97."

I. Modecca, M. Rœm. "Syn. Pepon. p. 98."

I. palmata, M. Rœm. "Syn. Pepon. p. 98."

I. Wightiana, M. Rœm. "Syn. Pepon. p. 98."

Modecca? bracteata, Lam. Encycl. IV, p. 210 (1797); "Spreng. Syst. III, p. 45"; DC. Prodr. III, p. 337.

INSULA AMAMI-ŌSHIMA: inter Nazé et Nishinakama (*T. Itō*, n. 729, 20 Julio 1894, flor.).

DISTRIB. Japan, Malaya, India and Ceylon.

Lagenaria, Ser.

* **L. vulgaris**, Ser. in "Mém. Soc. Phys. Genèv. III, pt. 1 (1825) p. 25," et in DC. Prodr. III, p. 299; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 341; "M. Rœm. Syn. Pepon. p. 60"; "Wight, Illustr, t. 105*"; Torr. et Gray, Fl. N. Am.

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I, p. 543; "Naud. in Ann. Sc. Nat. ser. 4, XII (1862) p. 91, et ser. 5, V (1866) p. 8"; Grisebach, Fl. Brit. W. Ind. Isl. p. 288; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 529; Harvey et Sond. Fl. Cap. II, p. 489; Benth. Fl. Austral. III, p. 316; Franch. et Sav. Enum. Pl. Jap. I, p. 175; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 613; Cogn. in "Mart. Fl. Brasil. fasc. 78, p. 8," et in DC. Monogr. Phanerog. III, p. 417; Forbes et Hemsl. Ind. Fl. Sin. I, p. 314, in adnot.; Hillebrand, Fl. Hawaii. Isl. p. 134; Henry, List Pl. Formos. p. 45.

L. cochinchinensis, M. Rœm. "Syn. Pepon. p. 61."

L. hispida, Ser. in DC. Prodr. III, p. 299.

L. idolatrica, Ser. in DC. Prodr. III, p. 299.

L. microcarpa, Naud. in "Rev. Hort. (1855) p. 65, cum ic. col."

L. vittata, Ser. in DC. Prodr. III, p. 299.

Cucurbita idololatrica, Willd. Sp. Pl. IV, p. 607; Blume, Bijdr. p. 930.

C. Lagenaria, L. Sp. Pl. ed. 1, p. 1010; Lam. Illustr. t. 795; Willd. Sp. Pl. IV, p. 606; Thunb. Fl. Jap. p. 323; Roxb. Fl. Ind. III, p. 718.

C. leucantha, Duchesne, in Lam. Encycl. II, p. 150.

C. siceraria, Molina, "Sag. Chile, p. 133"; Willd. Sp. Pl. IV, p. 607; Ser. in DC. Prodr. III, p. 318.

C. vittata, Blume, Bijdr. p. 932.

LÛTCHÛ, ex *Tashiro* in MS. Cult.

DISTRIB. Native country uncertain: cultivated in the tropics and warm temperate zones of the whole world. Also cultivated in Japan, Formosa, China and India.

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Luffa, [Tourn.] L.

* **L. cylindrica,** M. Rœm. "Syn. Pepon. p. 63 (1846)"; "Naud. in Ann. Sc. Nat. ser. 4, XII (1859) p. 119"; Cogn. in DC. Monogr. Phanerog. III, p. 456, cum plurr. synonn; Forbes et Hemsl. Ind. Fl. Sin. I, p. 315.

L. ægyptiaca, Mill. "Gard. Dict. ed. VIII"; Ser. in DC. Prodr. III, p. 303; "M. Rœm. Syn. Pepon. p. 64"; Miq. Fl. Ind. Bat. I, pt. 1, p. 666; Benth. Fl. Austral. III, p. 317; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 530; "Cogn. in Mart. Fl. Bras. fasc. 78, p. 10"; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 614.

L. Cattu-Picinna, Ser. in DC. Prodr, III, p. 303; "M. Rœm. Syn. Pepon. p. 64."

L. fœtida, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 168 (non Cav.).

L. pentandra, Roxb. "Hort. Beng. p. 60," et Fl. Ind. III, p. 712; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 343; Wight, Ic. Pl. Ind. Or. t. 499, et "Illustr. t. 105 bis"; "M. Rœm. Syn. Pepon. p. 65"; Miq. Fl. Ind. Bat. I, pt. 1, p. 667.

L. Petola, Ser. in DC. Prodr. III, p. 303; "M. Rœm. Syn. Pepon. p. 65"; Miq. Fl. Ind. Bat. I, pt. 1, p. 667; Miq. Prol. Fl. Jap. p. 13; Franch. et Sav. Enum. Pl. Jap. I, p. 174.

Karivia ? longicirrha, Miq. Prol. Fl. Jap. p. 12.

Momordica cylindrica, L. Sp. Pl. ed. 1, p. 1009; Lam. Encycl. IV, p. 241; Willd. Sp. Pl. IV, p. 604; Ser. in DC. Prodr. III, p. 311; "M. Rœm. Syn. Pepon. p. 67."

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M. Luffa, L. Sp. Pl. ed. 1, p. 1009; Lam. Encycl. IV, p. 240; Lour. Fl. Cochinch. p. 590; Willd. Sp. Pl. IV, p. 603.

LÛTCHÛ, cult. ex *Tashiro* in MS.

DISTRIB. Native country uncertain; cultivated throughout the tropical and subtropical zones of the world. Also cultivated in Japan, China and India.

Benincasa, Savi.

* **B. cerifera**, Savi, in "Bibl. Ital. IX, p. 158 (1818)"; Ser. in "Mém. Soc. Phys. Genèv. III, pt. 1 (1825) t. 4," et in DC. Prodr. III, p. 303; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 344; "M. Rœm. Syn. Pepon. p. 62"; Miq. Fl. Ind. Bat. I, pt. 1, p. 665; "Naud. in Ann. Sc. Nat. ser. 4, XII (1862) p. 87"; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 532; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 616; Forbes et Hemsl. Ind. Fl. Sin. I, p. 315.

B. hispida, Cogn. in DC. Monogr. Phanerog. III, p. 513.

Cucurbita cerifera, Fisch. "Cat. Hort. Gorenk, ex Savi, in Bibliot. Ital. IX (1818) p. 158."

C. farinosa, Blume, Bijdr. p. 931; Ser. in DC. Prodr. III, p. 317; "M. Rœm. Syn. Pepon. p. 91."

C. hispida, Thunb. Fl. Jap. p. 322 (1784); Willd. Sp. Pl. IV, p. 608; Blume, Bijdr. p. 931.

C. Pepo, Lour. Fl. Cochinch. p. 593; Roxb. Fl. Ind. III, p. 718 (non L.).

C. villosa, Blume, Bijdr. p. 931; Ser. in DC. Prodr.

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III, p. 317; "M. Rœm. Syn. Pepon. p. 91"; Miq. Fl. Ind. Bat. I, pt. 1, p. 672.

Lagenaria? dasystemon, Miq. Prol. Fl. Jap. p. 13; Franch. et Sav. Enum. Pl. Jap. p. 173.

L.? hispida, Ser. in DC. Prodr. III, p. 299; "M. Rœm. Syn. Pepon. p. 61"; Miq. Fl. Ind. Bat. I, pt. 1, p. 669.

Gymnopetalum septemlobum, Miq. Fl. Ind. Bat. I, pt. 1, p. 679.

LÛTCHÛ, culta, ex *T. Itō*.

NOM. LUTCH.: Shibui (U.); Shiburu (Y.) sec. *T. Itō*.

DISTRIB. Native country uncertain; cultivated in Japan, China, Malaya (including the Philippine Islands), India, Africa and Polynesia.

Momordica, [Tourn.] L.

* **M. Charantia,** L. Sp. Pl. ed. 1, p. 1009; Lour. Fl. Cochinch. p. 589; Lam. Encycl. IV, p. 239, t. 794, f. 2; Willd. Sp. Pl. IV, p. 602; Bot. Mag. t. 2455; Ser. in DC. Prodr. III, p. 311; Roxb. Fl. Ind. III, p. 707; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 348; Torr. et Gray, Fl. N. Am. I, p. 543; Wight, Ic. Pl. Ind. Or. t. 504, et "Illustr. t. 105 bis"; "M. Rœm. Syn. Pepon. p. 56"; Miq. Fl. Ind. Bat. I, pt. 1, p. 663; "Naud. in Ann. Sc. Nat. ser. 4, XII (1862) p. 131"; Grisebach, Fl. Brit. W. Ind. Isl. p. 287; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 537; Benth. Fl. Hongk. p. 125; Miq. Prol. Fl. Jap. p. 13; Franch. et Sav. Enum. Pl. Jap. I, p. 174; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 616; Cogn. in "Mart.

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Fl. Bras. fasc. 78, p. 14," et in DC. Monogr. Phanerog. III, p. 436; Forbes et Hemsl. Ind. Fl. Sin. I, p. 315.

Cucumis africanus, Lindl. in "Bot. Regist. XII, t. 980 (non L.)."

C. intermedius, M. Rœm. "Syn. Pepon. p. 80."

LÛTCHÛ, cult., ex *Tashiro* in MS.

DISTRIB. Native country uncertain, though it is supposed to be indigenous in tropical Asia. Cultivated in Japan, Hongkong, China, Malaya (including the Philippine Islands), India, tropical Africa, and introduced into America.

Cucumis, [Tourn.] L.

* **C. Melo,** L. Sp. Pl. ed. 1, p. 1011; Thunb. Fl. Jap. p. 323; Lour. Fl. Cochinch. p. 591; Willd. Sp. Pl. IV, p. 613; Ser. in DC. Prodr. III, p. 300; Roxb. Fl. Ind. III, p. 720; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 341; "Jacq. Monogr. du Melon, t. 1-33"; "Naud. in Ann. Sc. Nat. ser. 4, XII (1862) p. 161 (var. cantonianus)"; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 546; Miq. Prol. Fl. Jap. p. 13; Franch. et Sav. Enum. Pl. Jap. I, p. 174, in adnot.; Clarke, in Hook. Fl. Brit. Ind. II, p. 620; Cogn. in DC. Monogr. Phanerog. III, "p. 482"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 317; Henry, List Pl. Formos. p. 45.

C. Chæta, Wall. "Cat. n. 6727."

C. Chito, Morr. in "Ann. Soc. Gand, V (1849) p. 341, t. 278."

C. cicatrisatus, Stocks, in "Hook. Kew Journ. Bot. IV (1852) p. 148."

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C. Conomon, Thunb. Fl. Jap. p. 324; Ser. in DC. Prodr. III, p. 301.

C. flexuosus, L. "Sp. Pl. ed. 2, p. 1437"; Ser. in DC. Prodr. III, p. 300; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 342.

C. Gurmia, Wall. "Cat. n. 6726."

C. maculatus, Willd. Sp. Pl. IV, p. 614; Ser. in DC. Prodr. III, p. 302; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 342.

C. utilissimus, Roxb. "Hort. Beng. p. 70," et Fl. Ind. III, p. 721; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 342.

LŪTCHŪ, cult., ex *Tashiro* in MS.

DISTRIB. Probably indigenous both in tropical Asia and tropical Africa (*cf.* Forbes and Hemsley, loc. cit); cultivated throughout Japan, Formosa, China and India. Clarke suggests that it may perhaps be the cultivated race of *C. trigonus*, Roxb.

***C. sativus**, L. Sp. Pl. ed. 1, p. 1012; "Gærtn. Fruct. t. 88"; Lam. Illustr. t. 795; Thunb. Fl. Jap. p. 324; Willd. Sp. Pl. IV, p. 615; Lour. Fl. Cochinch. p. 591; Ser. in DC. Prodr. III, p. 300; Roxb. Fl. Ind. p. 720; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 342; Hook. et Arn. Bot. Beech. Voy. p. 263; "M. Rœm. Syn. Pepon. p. 76"; Miq. Fl. Ind. Bat. I, pt. 1, p. 671; "Naud. in Ann. Sc. Nat. ser. 4, XI (1859) p. 27"; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 542; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 620; Cogn. in "Mart. Fl. Bras. fasc. 78, p. 17," et in DC. Monogr. Phanerog. III, p. 498; Alph. DC. Orig. Pl. Cult. p. 210; Franch. et Sav. Enum. Pl.

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Jap. I, p. 174, in adnot.; Forbes et Hemsl. Ind. Fl. Sin. I, p. 317; Henry, List Pl. Formos. p. 45.

C. Hardwickii, Royle, "Illustr. Bot. Himal. p. 220, t. 47, f. 3"; Walp. Repert. II, p. 201; "M. Rœm. Syn. Pepon. p. 77"; "Naud. in Ann. Sc. Nat. ser. 4, XI (1859) p. 30."

C. muricatus, Willd. Sp. Pl. IV, p. 613; Ser. in DC. Prodr. III, p. 301; "M. Rœm. Syn. Pepon. p. 74"; "Naud. in Ann. Sc. Nat. ser. 4, XI (1859) p. 85."

LÛTCHÛ, sec. *Hooker* et *Arnott*, cult., ex *Tashiro* in MS.

NOM. LUTCH.: Kii-ui (U.) ex *T. Itō*.

DISTRIB. Native country uncertain; supposed to have originated in Northern India (*cf.* Forbes and Hemsley, loc. cit.). Cultivated in all warm and warm temperate countries. Also commonly cultivated in Japan, Formosa, China, Malaya, India, Ceylon and Africa.

Citrullus, Forsk.

* **C. vulgaris**, Schrad. ex "Eckl. et Zyh. Enum. p. 279"; "Naud. in Ann. Sc. Nat. ser. 4, XII (1859) p. 100"; Benth. Fl. Hongk. p. 125; Sonder, in Harv. et Sond. Fl. Cap. II, p. 494; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 549; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 621; Cogn. in DC. Monogr. Phanerog. III, "p. 508"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 318, in adnot.; Henry, List Pl. Formos. p. 46.

C. amarus, Schrad. in "Eckl. et Zyh. Enum. p. 279."

C. aquosus, Schur, "Enum. Pl. Transs. p. 221."

C. caffer, Schrad. "Ind. Sem. Hort. Gotting. (1834) ex Eckl. et Zeyh. Enum. p. 279."

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C. caffrorum, Schrad. in "Linnæa, XII (1838) p. 413."

C. chodospermis, Fal. et Dun. in "Bull. Soc. Agr. Hérault (1836) p. 264."

C. edulis, Spach, "Hist. Vég. Phan. VI, p. 314"; Franch. et Sav. Enum. Pl. Jap. I, p. 175.

C. fistulosus, Stocks, in "Hook. Kew Journ. Bot. III (1851) p. 74, t. 3."

C. Pasteca, Sageret, in "Ann. Sc. Nat. ser. 1, VIII (1826) p. 312."

Cucumis amarissimus, Schrad. "Ind. Sem. Hort. Gotting. (1827)."

Cucumis Citrullus, Ser. in DC. Prodr. III, p. 301.

Cucumis Colocynthis, Thunb. "Prodr. Pl. Cap. p. 13."

Cucumis dissectus, Decne. in "Nouv. Ann. Mus. Par. III (1834) p. 449."

Cucurbita Anguira, Duchesne, in Lam. Encycl. II, p. 158.

Cucurbita caffra, Eckl. et Zeyh. "Enum. p. 279."

Cucurbita Citrullus, L. Sp. Pl. ed. 1, p. 1010; Willd. Sp. Pl. IV, p. 610; Thunb. Fl. Jap. p. 323; Roxb. Fl. Ind. III, p. 719; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 351.

Momordica lanata, Thunb. "Prodr. Pl. Cap. p. 13."

LÛTCHÛ, cult., ex *T. Itō*, nec non ex *Tashiro* in MS.

NOM. LUTCH.: Kwantu-ui (U.) ex *T. Itō*.

DISTRIB. Africa, commonly cultivated in all warm countries of the world. Also cultivated in Japan, Formosa, Hongkong, China and India.

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Cucurbita, [Tourn.] L.

* **C. Pepo,** L. Sp. Pl. ed. 1, p. 1010; Willd. Sp. Pl. IV, p. 609; Thunb. Fl. Jap. p. 323; Ser. in DC. Prodr. III, p. 317; Roxb. Fl. Ind. III, p. 718; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 351; "M. Rœm. Syn. Pepon. p. 84"; "Naud. in Ann. Sc. Nat. ser. 4, VI (1856) p. 29"; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 556; Franch. et Sav. Enum. Pl. Jap. I, p. 175, in adnot.; Forbes et Hemsl. Ind. Fl. Sin. I, p. 317, in adnot.; Cogn. in "Mart. Fl. Bras. fasc. 78, p. 21," et in DC. Monogr. Phanerog. III, p. 545.

C. aurantia, Willd. Sp. Pl. IV, p. 607; Ser. in DC. Prodr. III, p. 317.

C. Melopepo, L. Sp. Pl. ed. 1, p. 1010; Willd. Sp. Pl. IV, p. 610; Ser. in DC. Prodr. III, p. 317.

C. ovifera, L. Mant. I, p. 126; Willd. Sp. Pl. IV, p. 607; Ser. in DC. Prodr. III, p. 317, et in "Mém. Genève, III, pt. 2, t. 1."

C. polymorpha, Duchesne, in Lam. Encycl. II, p. 152.

C. pyxidaris, DC. Fl. Fr. III, p. 693; "M. Rœm. Syn. Pepon. p. 86."

C. subverrucosa, Willd. Sp. Pl. IV, p. 609; Ser. in DC. Prodr. III, p. 317; "M. Rœm. Syn. Pepon. p. 85."

C. verrucosa, L. Sp. Pl. ed. 1, p. 1010; Willd. Sp. Pl. IV, p. 609; Ser. in DC. Prodr. III, p. 317; "M. Rœm. Syn. Pepon. p. 85."

LÛTCHÛ, cult., ex *T. Itō,* nec non ex *Tashiro* in MS.

NOM. LUTCH.: Nankwa (U.); Kabutchâ (Y.) sec. *T. Itō.*

DISTRIB. Native country uncertain; supposed to be in-

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digenous to southern Asia. Commonly cultivated in all warm and temperate parts of the world; also cultivated in Japan, China and India.

Bryonopsis, Arn.

B. laciniosa, Naud. in "Ann. Sc. Nat. ser. 5, VI (1866) p. 30"; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 556; Cogn. in DC. Monogr. Phanerog. III, p. 477.

B. courtallensis, Arn. in "Hook. Journ. Bot. III (1841) p. 274."

B. erythrocarpa, Naud. in "Ann. Sc. Nat. ser. 4, XVIII (1862) p. 194."

B. pedata, Hassk. Cat. Hort. Bog. p. 189.

Bryonia laciniosa, L. Sp. Pl. ed. 1, p. 1013; Lam. Encycl. I, p. 497; Willd. Sp. Pl. IV, p. 624; Ser. in DC. Prodr. III, p. 308; Roxb. "Hort. Beng. p. 104," et Fl. Ind. III, p. 728; Blume, Bijdr. p. 927; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 345; Wight, Ic. Pl. Ind. Or. t. 500; "M. Rœm. Syn. Pepon. p. 40"; Miq. Fl. Ind. Bat. I, pt. 1, p. 660; "Naud. in Ann. Sc. Nat. ser. 4, XII, p. 139"; Benth. Fl. Austral. III, p. 319; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 622; Cogn. in DC. Monogr. Phanerog. III, p. 477; Henry, List Pl. Formos. p. 46.

Bryonia palmata, L. Sp. Pl. ed. 1, p. 1012; Willd. Sp. Pl. IV, p. 623; Ser. in DC. Prodr. III, p. 308.

Bryonia pedata, Hassk. in "Flora, XXV (1842) Beibl. p. 42."

Bryonia quinquefolia, Noronha, in "Verh. Batav. Gen. V (1790) ed. 1, art. 4, p. 48."

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Bryonia tenuis, Klotzsch, in "Peters, Reise Mossamb. Bot. p. 150."

Bryonia variegata, Mill. "Gard. Dict. ed. 8, n. 5"; Ser. in DC. Prodr. III, p. 308; "M. Rœm. Syn. Pepon. p. 39."

Coccinia palmata, Rœm. "Syn. Pepon. p. 93."

Cucumis verrucosus, Herb. Rottl. ex Clarke, in Hook. f. Fl. Brit. Ind. II, p. 623.

INSULA UTCHINÂ (*Tashiro*! April. 1887, frf.).

ARCHIPELAGO YÊMA: insula Yunakuni ad montem Urabu-daki (*S. Tanaka*! n. 397, 13 Junio 1891, frf.).

DISTRIB. Formosa, Malaya, India, Ceylon, tropical Africa, Mauritius and Australia.

Leaves scabrous and white-punctuate above, smooth below, broad, 5-8 cm. long, 6-9 cm. wide, palmately 5-fid, lobes ovate or ovate-lanceolate, slightly sinuate-toothed, teeth mucronate; petiole 4-6 cm. long, or often longer than the lamina, glabrous or sometimes muricate. Tendrils 2-branched, one branch being often smaller. "Flowers yellow" (*Tashiro* in msc.). Fruit baccate, globular, smooth, "bright red with white vertical stripes" (*Tashiro* in msc. and *S. Tanaka* in sched.), about 2 cm. diameter. Seeds obovoid, with a thickened corrugate margin, the faces conical with protuberances, 7 mm. long, 4 mm. wide, 4½ mm. thick.

Mukia, Arn.

M. scabrella, Arn. in "Hook. Journ. Bot. III (1841) p. 276"; Walp. Repert. II, p. 199; "M. Rœm. Syn. Pepon. p. 47"; "Wight, Illustr. Ind. Bot. t. 105 bis"; "Naud. in Ann.

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Sc. Nat. ser. 4, XII, p. 142"; Sonder, in Harv. et Sond. Fl. Cap. II, p. 489; Benth. Fl. Austral. III, p. 321; F. Muell. Fragm. Phyt. Austral. VI, p. 187; Hook. f. in Oliver, Fl. Trop. Afr. II, p. 561; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 623, excl. syn.; Forbes et Hemsl. Ind. Fl. Sin. I, p. 319; Henry, List Pl. Formos. p. 46.

M. althæoides, M. Rœm. "Syn. Pepon. p. 47."

M. maderaspatana, M. Rœm. "Syn. Pepon. p. 47."

M. Rottleri, M. Rœm. "Syn. Pepon. p. 47."

Bryonia althæoides, Ser. in DC. Prodr. III, p. 306.

B. callosa, Heyne, ex "Wall. Cat. n. 6708."

B. cordifolia, Russ. ex "Steud. Nom. ed. 2, I, p. 232."

B. maderaspatana, Lam. Encycl. I, p. 496; Ser. in DC. Prodr. III, p. 306.

B. micrantha, Hochst. ex Cogn. in DC. Monogr. Phanerog. III, p. 623.

B. micropoda, E. Mey. "Zwei Pfl. Docum. p. 169."

B. Rottleri, Spreng. "Syst. III, p. 15."

B. scabra, Rottl. ex Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 345 (non Thunb. nec Mey.).

B. scabrella, L. f. Suppl. p. 424; Lam. Encycl. I, p. 497; Willd. Sp. Pl. IV, p. 619; Blume, Bijdr. p. 926; Ser. in DC. Prodr. III, p. 306; Roxb. Fl. Ind. III, p. 724; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 305; Wight, Ic. Pl. Ind. Or. t. 501; Miq. Fl. Ind. Bat. I, pt. 1, p. 658.

Cucumis maderaspatanus, L. Sp. Pl. ed. 1, p. 1012; Willd. Sp. Pl. IV, p. 615 (non Lour. nec Wall. nec Soland. nec Roxb.).

Melothria maderaspatanus, Cogn. in DC. Monogr. Phanerog. III, p. 623.

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INSULA UTCHINÂ (*Tashiro*! Majo 1887, frf.).

INSULA MYÂKU (*Tashiro*! Julio 1887, fl., *T. Itō*, n. 1166, 9 Aug. 1894, fl. et frf.).

ARCHIPELAGO YÊMA: in insula Yunakuni ad montem Urabu-daki (*S. Tanaka*! n. 396, 13 Junio 1894, frf.).

DISTRIB. Formosa (Tamsui and Shinchiku, *Makino*! 1896), Malaya (including the Philippine Islands), India, Ceylon, Africa and Australia.

Zehneria, Endl.

Z. mysorensis, Arn. in "Hook. Journ. Bot. III (1841) p. 275"; "Wight in Ann. et Mag. Nat. Hist. ser. 1, VIII (1842) p. 261"; "M. Rœm. Syn. Pepon. p. 31"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 318; Henry, List Pl. Formos. p. 46; Makino, in Bot. Mag. Tōkyō, X, pt. 2 (1896) p. 59.

Z. Baueriana, Clarke, in Hook. f. Fl. Brit. Ind. II, p. 624 (non Endl.).

Z. mucronata, Miq. Fl. Ind. Bat. I, pt. 1, p. 656.

Bryonia maysorensis, Wall. "Cat. n. 6702"; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 345.

B. mucronata, Blume, Bijdr. p. 923; Ser. in DC. Prodr. III, p. 304; "M. Rœm. Syn. Pepon. p. 42."

B. mysorensis, Walp. Repert. II, p. 198; Wight, Ic. Pl. Ind. Or. t. 1609.

Melothria mucronata, Cogn. in DC. Monogr. Phanerog. III, p. 608.

INSULA AMAMI-ŌSHIMA: inter Taken et Nishinakama (*T. Itō*, n. 679, 19 Julio 1894, fl.).

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INSULA UTCHINÂ (*Tashiro*! April. 1887, frf.) : ad oppidum Shui (*Kuroiwa* ex *Makino*).

DISTRIB. Formosa, Hongkong, South China, Malaya (including the Philippine Islands) and India.

Z. Baueriana, Endl. "Prodr. Fl. Norfolk. p. 69," et "Iconogr. tt. 116 et 117"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 318; "M. Rœm. Syn. Pepon. p. 31."

Melothria Baueriana, F. Muell. Fragm. Phyt. Austral. VI, p. 188; Cogn. in DC. Monogr. Phanerog. III, p. 610.

M. samoënsis, A. Gray, "Bot. Un. St. Expl. Exped. I, p. 641."

Pilogyne Zehneria, Steud. "Nomencl. ed. 2, II, p. 334."

LÛTCHÛ (*Wright,* sec. *Forbes* et *Hemsley*).

DISTRIB. Bonin, Norfolk, Erromago and New Caledonia.

"*Bryonia sp.* foliis petiolatis late cordatis subangulatis grosse dentatis supra punctis callosis albis onustis subtus glabris, cirrhis simplicibus," Hooker et Arnott, Bot. Beech. Voy. p. 263, from Lûchû is an obscure plant. It seemed at first to be *Bryonopsis laciniosa,* Naud., but it differs by its tendrils being simple and not bifurcate; nor can it be *Mukia scabrella,* Arn., the leaves of which are highly scabrid on both sides and not glabrous below; nor shall we attempt to identify it with *Zehneria Baueriana,* Endl., as the latter is unknown to us.

Gynostemma, Blume.

G. pedatum, Blume, Bijdr. p. 23; Walp. Repert. I, p. 98; "M. Rœm. Syn. Pepon. p. 110"; Miq. Fl. Ind. Bat. I, pt. 1, p. 683; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 633, excl.

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syn.; Cogn. in DC. Monogr. Phanerog. III, p. 913; Franch. Pl. David. I, p. 136; Forbes et Hemsl. Ind. Fl. Sin. I, p. 320.

G. Blumei, Hassk. Cat. Hort. Bog. p. 311.

G. cissoides, Benth. et Hook. Gen. Pl. I, p. 839; Franch. et Sav. Enum. Pl. Jap. I, p. 176.

Alsomitra cissoides, M. Rœm. "Syn. Pepon. p. 118."

Enkylia digynia, Griffith, "Pl. Cantor. p. 27."

E. trigynia, Griffith, "Pl. Cantor. p. 27"; Miq. Prol. Fl. Jap. pp. 15 et 142.

Pestalozzia pedata, Zoll. et Mor. "Syst. Verz. Zoll. Pfl. p. 31 (1846)"; Walp. Ann. I, p. 316.

Vitis atroviridis, Wall. "Cat. n. 6040."

V. trichophora, Wall. "Cat. n. 6039."

Zanonia cissoides, Wall. "Pl. As. Rar. II, p. 28"; Walp. Repert. II, p. 194.

Z. pedata, Miq. "Fl. Ind. Bat. I, pt. 1, p. 683."

Insula Amami-Ōshima (*Tashiro*! Sept. 1887, fl.).

Insula Utchinâ: in tractu Kundjan (*Tashiro*! April. 1887, fl.).

Distrib. Japan, China, Malaya and India.

BEGONIACEÆ.

Begonia, L.

B. Evansiana, Andrews, "Bot. Repos. t. 627"; Bot. Mag. t. 1473; DC. Prodr. XV, pt. 1, p. 313; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 628; Franch. Pl. David. I, p. 136; Forbes et Hemsl. Ind. Fl. Sin. I, p. 321.

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B. discolor, Ait. Hort. Kew. ed. 2, V, p. 184; Walp. Repert. II, p. 206; Bunge, Enum. Pl. Chin. Bor. p. 57.

B. grandis, Dryand. in Trans. Linn. Soc. I (1791) p. 163; Miq. Prol. Fl. Jap. p. 132; Franch. et Sav. Enum. Pl. Jap. I, p. 176; Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 167.

B. obliqua, Thunb. Fl. Jap. p. 231; Banks, Ic. Kæmpf. t. 20 (non L.).

B. sinensis, DC. Prodr. XV, pt. 1, p. 313.

Diploclinium Evansianum, Lindl. Veg. Kingd. ed. 1, p. 318, f. 220.

Knesebeckia discolor, Klotzsch, "Begon. p. 44."

Insula Amami-Ōshima, sec. *Tashiro* in MS.

Insula Utchinâ, sec. *Tashiro* in MS.

Archipelago Yêma (sec. *Tashiro* in MS.): insula Irumuti (sec. *S. Tanaka* in sched.); insula Yunakuni ad montem Urabu-daki (*S. Tanaka*! n. 398, 13 Junio 1891, folium tantum).

Distrib. Japan, China and Java.

The form of the leaves in Tanaka's specimens agrees exactly with that of *B. Evansiana*, Andr., but it is impossible to decide their specific identity without examining either flower or fruit.

The Luchuan plant is distinguished from *B. laciniata*, Roxb. *var. Bowringiana*, Alph. DC. in DC. Prodr. XV, pt. 1, p. 349 (*B. Bowringiana*, Champ.; Bot. Mag. t. 5182) of Formosa (*Makino*! 1896) and Hongkong, by the margin of its leaves not being cut into 5-7 acute or acuminate lobes.

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FICOIDEÆ.

Tetragonia, L.

T. expansa, Murr. "Comm. Gœtt. VI, p. 13 (1783)"; Thunb. Fl. Jap. p. 208, et in Trans. Linn. Soc. II (1794) p. 335; Willd. Sp. Pl. II, p. 1025; Ait. Hort. Kew. ed. 1, II, p. 178; DC. Prodr. III, p. 452; Benth. Fl. Austral. III, p. 325; Miq. Prol. Fl. Jap. p. 89; Franch. et Sav. Enum. Pl. Jap. I, p. 177; Hook. f. Handb. N. Zeal. Fl. p. 84; Hance, in Journ. Bot. 1870, p. 276, et 1878, p. 227; Bot. Mag. t. 2362; Forbes et Hemsl. Ind. Fl. Sin. I, p. 323; Henry, List Pl. Formos. p. 46; Shitsumon Honzō, Gwaihen, III, t. 18.

T. cornuta, Gærtn. "Fruct. II, p. 483, t. 179, f. 3."

T. enermis, F. Muell. in "Linnæa, XXV (1852) p. 384."

T. halimifolia, Forst. f. "Prodr. p. 39."

T. japonica, Thunb. Fl. Jap. p. 208.

T. quadricornis, Stokes, "Bot. Mat. Med. III, p. 127."

Insulis Amami-Ōshima, Utchinâ, et ubique in Lûtchû, ex *Tashiro* in MS.

Distrib. Japan, the Vries Islands! the Bonin Islands, Formosa, Hongkong, China, Australia, New Zealand and South America.

Sesuvium, L.

S. Portulacastrum, L. "Sp. Pl. ed. 2, p. 684"; Willd. Sp. Pl. II, p. 1009; Lam. Illustr. t. 434, f. 2; DC. Prodr. III, p. 453; Roxb. Fl. Ind. II, p. 509; Bot. Mag. t. 1701; Grise-

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bach, Fl. Brit. W. Ind. Isl. p. 57; Chapman, Fl. S. Un. St. p. 44; A. Gray, Man. Bot. N. Un. St. p. 97; "Rohrb. in Mart. Fl. Bras. XIV, 2, p. 309, t. 70"; Oliver, Fl. Trop. Afr. II, p. 586; Benth. Fl. Austral. III, p. 328; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 659; Hemsl. in Bot. Voy. 'Challenger,' I, pt. 3, p. 155; Forbes et Hemsl. Ind. Fl. Sin. I, p. 323; Hillebrand, Fl. Hawaii. Isl. p. 140; Henry, List Pl. Formos. p. 46.

S. edule, Wight, ex "Wall. Cat. n. 6836 D."

S. longifolium, Humb. et Bonpl. ex "Willd. Enum. Pl. Hort. Berol. p. 521."

S. repens, Willd. "Enum. Pl. Hort. Berol. p. 521"; DC. Prodr. III, p. 453; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 361; "Wight, in Hook. Comp. Bot. Mag. II, p. 71, t. 23."

S. revolutifolium, Ortega, "Hort. Matr. Dec. p. 19"; DC. Prodr. III, p. 453.

S. revolutum, Pers. Syn. II, p. 39.

Port. parviflorum, DC. Prodr. III, p. 453.

Port. pedunculatum, Pers. Syn. II, p. 39.

Port. sessile, Pers. Syn. II, p. 39.

Port. sessiliflorum, Dumb. ex "Rohrb. in Mart. Fl. Bras. XIV, 2, p. 310."

Psammanthe marina, Hance, in Walp. Ann. II, p. 659.

Pyxipoma polyandrum, Fenzl, in "Ann. Wien. Mus. II (1839) p. 293"; Miq. Fl. Ind. Bat. I, p. 1060; Maxim. in Mél. Biol. XII (1886) p. 460.

Trianthema monogyna, L. Mant. I, p. 69.

T. obcordata, Roxb. "Hort. Beng. p. 34," et Fl. Ind. II, p. 445.

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T. polyandra, Blume, Bijdr. p. 1137; DC. Prodr. III, p. 453.

LÛTCHÛ (*H. Nakagawa*! n. 62, flor.) in maritimis (*Tashiro*, Majo fl. et fr. immat., sec. *Maximowicz*).

INSULA UTCHINÂ: ad oppidum Nâfa (*Tashiro*! Aug. 1887, *S. Tanaka*! n. 12, Majo 1891, steril., *T. Itō*, n. 911, 28 Julio 1894, fl. et. frf.); ad pagum Djiima-mura (*T. Itō*, n. 853, 17 Aug. 1894, flor. et fructif., flores albi!).

INSULA MYÂKU (*Tashiro*! Julio 1887); insula Irabu (*T. Itō*, 17 Aug. 1894).

ARCHIPELAGO YÊMA: insula Sutubanari (*T. Itō*, n. 1487, 13 Aug. 1894, fl. et frf.).

INSULA KUMI, ex *Tashiro*.

NOM. LUTCH.: Hama Midzuna, sec. *Tashiro* et *S. Tanaka* in MS.; Mitchina (Y.) ex *T. Itō*.

DISTRIB. Formosa, China, Malaya, India, Polynesia and America; almost cosmopolitan on tropical and subtropical sea-shores.

Mollugo, L.

M. pentaphylla, L. Sp. Pl. ed. 1, p. 89; Willd. Sp. Pl. I, p. 492; DC. Prodr. I, p. 391; Roxb. "Hort. Beng. p. 9," et Fl. Ind. I, p. 359; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 44.

M. stricta, L. "Sp. Pl. ed. 2, p. 131"; DC. Prodr. I, p. 391; Fenzl, in Walp. Ann. II, p. 241; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 44; Benth. Fl. Hongk. p. 23; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 663; Miq. Prol. Fl. Jap. pp. 11 et 303 (var. latifolia, Fenzl); Franch.

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et Sav. Enum. Pl. Jap. I, p. 177 (varr. angustifolia et latifolia, Fenzl); Franch. Pl. David. I, p. 137; Forbes et Hemsl. Ind. Fl. Sin. I, p. 324; Henry, List Pl. Formos. p. 46.

M. subserrata, Blanco, Fl. Filip. ed. I, p. 51.

M. triphylla, Lour. Fl. Cochinch. p. 79; DC. Prodr. I, p. 392; Roxb. "Hort. Beng. p. 9," et Fl. Ind. I, p. 360; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 44.

M. Linkii, Seringe, in DC. Prodr. I, p. 392.

M. trifolia, Schult. "Mart. II, p. 471."

Pharnaceum Linkii, D. Dietr. "Syn. Pl. II, p. 1014."

P. pentaphyllum, Spreng. Syst. I, p. 949.

P. strictum, Spreng. Syst. I, p. 949.

P. triphyllum, Spreng. Syst. I, p. 949.

LŪTCHŪ (*H. Nakagawa*! flor. cum fruct.).

INSULA AMAMI-ŌSHIMA, ex *Tashiro* in MS.

DISTRIB. Japan, Formosa, Hongkong, China, India, Ceylon, Malaya and Polynesia.

UMBELLIFERÆ.

Hydrocotyle, [Tourn.] L.

H. asiatica, L. Sp. Pl. ed. 1, p. 234; Willd. Sp. Pl. p. 1362; Thunb. Fl. Jap. p. 116; DC. Prodr. IV, p. 62; "A. Rich. Monogr. Hydroc. in Ann. Sc. Phys. IV (1820) n. 15, f. 11"; "Cham. et Schlecht. in Linnæa, I (1826) p. 365"; Roxb. "Hort. Beng. p. 31," et Fl. Ind. II, p. 88; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 366; Wight, Ic. Pl. Ind. Or. t.

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565; Hook. et Arn. Bot. Beech. Voy. p. 263; Benth. Fl. Hongk. p. 134, et Fl. Austral. III, p. 346; Miq. Prol. Fl. Jap. p. 243; Franch. et Sav. Enum. Pl. Jap. I, p. 178; Griseb. Fl. Brit. W. Ind. Isl. p. 307; Hook. f. Handb. N. Zeal. Fl. p. 86; Sonder, in Harv. et Sond. Fl. Cap. II, p. 527; Hiern, in Oliver, Fl. Trop. Afr. III, p. 6; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 669; Maxim. in Mél. Biol. XII (1886) p. 461; Forbes et Hemsl. Ind. Fl. Sin. I, p. 324; Henry, List Pl. Formos. p. 47.

H. abbreviata, A. Rich. "Monogr. Hydroc. in Ann. Sc. Phys. IV (1820) p. 183, t. 58, f. 19"; DC. Prodr. IV, p. 63.

H. cordifolia, Hook. f. Ic. Pl. t. 303.

H. dentata, A. Rich. "Monogr. Hydroc. in Ann. Sc. Phys. IV (1820) p. 182, t. 60, f. 22."

H. hebecarpa, DC. Prodr. IV, p. 63.

H. inæquipes, DC. Prodr. IV, p. 63.

H. lurida, Hance, in Walp. Ann. II, p. 690.

H. nummularioides, A. Rich. "Monogr. Hydroc. in Ann. Sc. Phys. IV (1820) p. 176, t. 55, f. 9.

H. pallida, DC. Prodr. IV, p. 63.

H. Wightiana, Wall. "Cat. n. 7220."

Trisanthus cochinchinensis, Lour. Fl. Cochinch. p. 176?

LÛTCHÛ (sec. *Bentham*, *Hook.* et *Arnott*; *Wright* ex *Forbes* et *Hemsley*).

INSULA UTCHINÂ: in oppido Nâfa ad Idzunzatchi-mura (*Yamada*! 1882, steril.); circa Tumigushiku (*T. Itō*, n. 912, 28 Julio 1894, frf.).

ARCHIPELAGO YÊMA: insula Kuru-shima, ex *Tashiro*.

NOM. LUTCH.: Bun-bu-dō (U.) ex *Yamada* in sched.

DISTRIB. Japan, the Bonin Islands, Formosa (*Makino*!

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1896), Hongkong, China, Malaya (including the Philippine Islands), India, Ceylon, Africa, South America, Australia and Polynesia.

H. rotundifolia, Roxb. "Hort. Beng. p. 21," et Fl. Ind. II, p. 88; DC. Prodr. IV, p. 64; Wight, Ic. Pl. Ind. Or. t. 564; Benth. Fl. Hongk. p. 134; "Hance, in Ann. Sc. Nat. ser. 4, XVIII (1862) p. 220"; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 668; Maxim. in Mél. Biol. XII (1886) p. 461; Forbes et Hemsl. Ind. Fl. Sin. I, p. 325; Henry, List. Pl. Formos. p. 47.

H. Batrachium, Hance, in "Ann. Sc. Nat. ser. 4, XVIII (1862) p. 220."

H. nitidula, A. Rich. "Monogr. Hydroc. in Ann. Sc. Phys. IV (1820) p. 200, t. 63, f. 33"; DC. Prodr. IV, p. 66; "Hook. Exot. Fl. t. 29"; Hiern, in Oliver, Fl. Trop. Afr. III, p. 5; Miq. Prol. Fl. Jap. p. 243.

H. perexigua, Hance, in Walp. Ann. II, p. 691.

H. puncticulata, Miq. Fl. Ind. Bat. I, pt. 1, p. 733.

H. ranunculoides, Blume, Bijdr. p. 884 (non L. f.).

H. sibthorpioides, Lam. Encycl. III, p. 153; Franch. et Sav. Enum. Pl. Jap. I, p. 178.

H. tenella, D. Don, Prodr. Fl. Nep. p. 183; DC. Prodr. IV, p. 64; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 366.

H. Zollingeri, Molkenb. in "Miq. Pl. Jungh. p. 91," et Fl. Ind. Bat. I, pt. 1, p. 733.

LÛTCHÛ (sec. *Bentham, Wright* ex *Forbes* et *Hemsley*).

INSULA UTCHINÂ: ad Shui (*T. Itō,* n. 792, 26 Julio 1894, fl. cum fruct.); inter Nâfa et Tchatan (*T. Itō,* n. 958, 21 Aug. 1894, fl. cum fruct.).

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INSULA MYÂKU: circa Gushiku (*Tatitu*! n. 1242, 25 Majo 1895, fl. cum fruct.).

DISTRIB. Japan, the Bonin Islands, Formosa (*Makino*! 1896), Hongkong, China, Malaya (including the Philippine Islands), India, Ceylon and Africa.

H. javanica, Thunb. "Dissert. Hydroc. n. 17, t. 2, ed. Pers. II, p. 415, t. 3"; DC. Prodr. IV, p. 67; "A. Rich. Monogr. Hydroc. in Ann. Sc. Phys. IV (1820) n. 41"; Miq. Fl. Ind. Bat. I, pt. 1, p. 734; Hance, in Journ. Bot. XXI (1883) p. 321; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 667; Maxim. in Mél. Biol. XII (1886) p. 462; Forbes et Hemsl. Ind. Fl. Sin. I, p. 325; Henry, List Pl. Formos. p. 47; Shitsumon Honzō, Gwaihen, III, t. 3.

H. Heyneana, Wall. "Cat. n. 563."

H. hirsuta, Blume, Bijdr. p. 884 (non Sw.).

H. hirta, R. Br. *var. acutiloba,* F. Muell. in Benth. Fl. Austral. III, p. 340.

H. hispida, D. Don, Prodr. Fl. Nep. p. 183.

H. nepalensis, Hook. "Exot. Bot. I, t. 30"; DC. Prodr. IV, p. 65; Miq. Fl. Ind. Bat. I, pt. 1, p. 735.

H. nepalensis, Hook. *var.,* Miq. Cat. Mus. Lugd. Bat. Fl. Jap. p. 40; Franch. et Sav. Enum. Pl. Jap. I, p. 178.

H. podantha, Molkenb. in "Miq. Pl. Jungh. p. 89."

H. polycephala, Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 366; Wight. Ic. Pl. Ind. Or. t. 1003.

H. strigosa, Buch.-Ham. in "Wall. Cat. n. 7219."

H. zeylanica, DC. Prodr. IV, p. 67; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 366; Miq. Fl. Ind. Bat. I, pt. 1, p. 734.

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INSULA AMAMI-ŌSHIMA : in Miyamantō inter Yamatohama et Taken (*T. Itō*, n. 614, 17 Julio 1894, fl.).

DISTRIB. Japan, Formosa, China, Malaya (including the Philippine Islands), India, Ceylon, Africa (Mozambique) and Australia.

Sanicula, [Tourn.] L.

S. satsumana, Maxim. in Mél. Biol. XII (1886) p. 465; Matsumura, in Bot. Mag. Tōkyō, XII (1898) p. 3.

INSULA UTCHINÂ : in valle prope Yakabi (*Matsumura*! Majo 1897, flor.).

DISTRIB. Japan.

Cryptotænia, DC.

C. japonica, Hassk. "Retzia, I, p. 113"; Maxim. in Mél. Biol. XII (1886) p. 467; Shitsumon Honzō, Gwaihen, I, t. 9.

C. canadensis, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 202; A. Gray, Bot. Jap. in Mem. Am. Acad. VI (1859) p. 391; Miq. Prol. Fl. Jap. p. 246; Hance, in Journ. Bot. III (1865) p. 340, V (1867) p. 114, et VIII (1870) p. 276; Franch. et Sav. Enum. Pl. Jap. I, p. 182; Forbes et Hemsl. Ind. Fl. Sin. I, p. 329 (non DC.).

Sison canadense, Thunb. Fl. Jap. p. 118 (non L.).

LÛTCHÛ (*Wright,* sec. *Forbes* et *Hemsley*).

INSULA UTCHINÂ (*Tashiro*! Majo 1887, frf.) : in oppido Shui (*T. Itō*, n. 793, 20 Julio 1887, fl.).

ARCHIPELAGO YÊMA (*Tashiro*! Julio 1887, frf.) : in insula Kuru-shima (ex *Tashiro*).

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Nom. Lutch.: Mitchiba-djiri (U.) sec. *T. Itō.*

Distrib. Japan and China.

We follow Maximowicz in keeping *C. japonica*, Hassk. and *C. canadensis*, DC. distinct; Forbes and Hemsly, however, unite the two species.

Phellopterus, Benth.

P. littoralis, Benth. in Benth. et Hook. f. Gen. Pl. I, p. 905; Fr. Schmidt, Reis. im Amurl. p. 138; Franch. et Sav. Enum. Pl. Jap. I, p. 185; Hance, in Journ. Bot. n. s. VII (1878) p. 12; "Franch. in Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 221"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 331.

Cymopterus littoralis, A. Gray, Bot. Jap. in Mem. Am. Acad. VI (1859) p. 391.

Glehnia littoralis, Fr. Schmidt, ex Miq. Prol. Fl. Jap. p. 249.

Lûtchû (*Wright* sec. *Forbes* et *Hemsley*, *Nakagawa*! n. 97, fl.).

Insula Amami-Ōshima, ex *Tashiro* in MS.

Insula Utchinâ, ex *Tashiro* in MS.

Insula Kuruma adjectis insula Myâku, ex *Tashiro* in MS.

Distrib. Japan, Saghalien, China and Corea.

Œnanthe, L.

Œ. stolonifera, DC. Prodr. IV, p. 138; Wight, Ic. Pl. Ind. Or. t. 571; Hance, in Journ. Linn. Soc. XIII (1873) p. 81, et in Journ. Bot. n. s. VII (1878) p. 228; Franch. et Sav. Enum. Pl. Jap. I, p. 185; Franch. Pl. David. I, p. 140, et in

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" Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 221 "; Maxim. in Engler, Bot. Jahrb. VI (1885) p. 61 ; Forbes et Hemsl. Ind. Fl. Sin. I, p. 331 ; Henry, List Pl. Formos. p. 47.

Œ. javanica, DC. Prodr. IV, p. 138 ; Miq. Cat. Mus. Lugd. Bat. Fl. Jap. p. 41.

Cyssopetalum javanicum, Turcz. in Bull. Soc. Nat. Mosc. 1849, pt. 2, p. 25.

Dasyloma japonicum, Miq. Prol. Fl. Jap. p. 247.

D. javanicum, Miq. Fl. Ind. Bat. I, pt. 1, p. 741.

D. latifolium, Lindl. in " Royle, Illustr. p. 232."

D. subbipinnatum, Miq. Prol. Fl. Jap. p. 247.

Phellandrium stoloniferum, Roxb. " Hort. Beng. p. 21," et Fl. Ind. II, p. 93.

Sium decumbens, Buerg. ex Miq. Prol. Fl. Jap. p. 247 (non Thunb.).

Insula Utchinâ (*Tashiro* ! Martio 1887, frf.) : in oppido Nâfa ad Idzunzatchi-mura (*Yamada* ! 1882, steril.) ; in tractu Kundjan ad Kushi-madjiri prope montem Wâsû-yama (*S. Tanaka* ! n. 257, 22 Majo 1891, fl.) et ad Mutubu (*S. Tanaka* ! n. 127, 18 Majo 1891, fl.).

Archipelago Yêma : in insula Ishigatchi ad pagum Nōra-mura (*T. Itō*, n. 1289, 11 Aug. 1894, frf.).

Nom. Lutch.: Shiiribâ (U.) ex *T. Itō*.

Distrib. Japan, Formosa, China, Java and India.

Œ. benghalensis, Benth. in Benth. et Hook. f. Gen. Pl. I, p. 906 ; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 696 ; Forbes et Hemsl. Ind. Fl. Sin. I, p. 331 ; Henry, List Pl. Formos. p. 47.

Biforis benghalensis, Wall. " Cat. n. 588."

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B. glauca, Wall. "Cat. n. 587."

Dasyloma benghalensis, DC. Prodr. IV, p. 140; Wight, Ic. Pl. Ind. Or. t. 568.

D. glauca, DC. Prodr. IV, p. 140; Hook. et Arn. Bot. Beech. Voy. p. 264.

Seseli benghalensis, Roxb. "Hort. Beng. p. 22," et Fl. Ind. II, p. 94.

LÛTCHÛ (sec. *Hook.* et *Arn.*; *Clarke*; *Beechey* sec. *Forbes* et *Hemsley*).

DISTRIB. The Bonin Islands, Formosa, China and India.

Angelica, [Riv.] L.

A. kiusiana, Maxim. in Mél. Biol. IX (1873) p. 14; Franch. et Sav. Enum. Pl. Jap. I, p. 187; Forbes et Hemsl. Ind. Fl. Sin. I, p. 334.

A. Sieboldi, Miq. Prol. Fl. Jap. p. 249, pro parte.

LÛTCHÛ, sec. *A. Gray*.

DISTRIB. Japan and the Corean Archipelago.

Peucedanum, L.

P. japonicum, Thunb. Fl. Jap. p. 117; DC. Prodr. IV, p. 182; Franch. et Sav. Enum. Pl. Jap. I, p. 189.

Ligustrum acutilobum, Miq. Prol. Fl. Jap. p. 248 (non Sieb. et Zucc.).

INSULA AMAMI-ŌSHIMA (*Yamada*! 1882, steril.); inter Nishinakama et Nazé (*T. Itō*, n. 730, 20 Julio 1894, frf.).

INSULA UTCHINÂ (*Tashiro*! Aug. 1887, steril.).

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ARCHIPELAGO YÊMA : in insula Kuru-shima (ex *Tashiro*).
DISTRIB. Japan.

Daucus, [Tourn.] L.

* **D. Carota,** L. Sp. Pl. ed. 1, p. 242; Thunb. Fl. Jap. p. 117; Willd. Sp. Pl. I, p. 1389; Lour. Fl. Cochinch. p. 178; DC. Prodr. IV, p. 211; Eng. Bot. t. 1174; Roxb. "Hort. Beng. p. 21," et Fl. Ind. II, p. 90; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 374; "Wight, Illustr. t. 117, f. 7"; Torr. et Gray, Fl. N. Am. I, p. 635; Ledeb. Fl. Alt. I, p. 295, et Fl. Ross. II, p. 338; A. Gray, Man. Bot. N. Un. St. p. 191; Grisebach, Fl. Brit. W. Ind. Isl. p. 308; Sonder, in Harv. et Sond. Fl. Cap. II, p. 563; Hiern, in Oliv. Fl. Trop. Afr. III, p. 25; Boiss. Fl. Orient. II, p. 1076; Hook. et Arn. Bot. Beech. Voy. p. 264; Miq. Prol. Fl. Jap. p. 252; Hance, in Journ. Bot. XX (1882) p. 6; Franch. et Sav. Enum. Pl. Jap. I, p. 190, in adnot. (var. maxima); Clarke, in Hook. f. Fl. Brit. Ind. II, p. 718; Nyman, Conspect. Fl. Europ. p. 279; "Franch. in Mém. Soc. Sc. Nat. Cherbourg, XXIV, p. 212"; Forbes et Hemsl. Ind. Fl. Sin. I, p. 336.

LÛTCHÛ, sec. *Hooker* et *Arnott*. Culta.

NOM. LUTCH.: Tchidê-kunii (U.) ex *T. Itō*.

DISTRIB. Western Europe, Siberia, India, North Africa, and introduced into North America and Australia; also cultivated in Japan, China and many other countries.

Caucalis, L.

C. Anthriscus, Huds. Fl. Angl. p. 99; "Fl. Dan. t. 919"; Eng. Bot. t. 987; D. Don, Prodr. Fl. Nep. p. 183; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 718.

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C. aspera, Lam. Fl. Fr. III, p. 424.

C. elata, D. Don, Prodr. Fl. Nep. p. 183.

C. japonica, Houtt. "Pfl. Syst. VIII, p. 42, t. 45, f. 1"; Franch. et Sav. Enum. Pl. Jap. I, p. 190.

C. orientalis, Lour. Fl. Cochinch. p. 177?

C. Scandix, Scop. "Fl. Carn. ed. 2, I, p. 191."

Chærophyllum scabrum, Thunb. Fl. Jap. p. 119.

Tordylium Anthriscus, L. Sp. Pl. ed. 1, p. 240.

Torilis Anthriscus, Bernh. "Syst. Verz. Erf. p. 167"; "C. C. Gmel. Fl. Bad. I, p. 613"; DC. Prodr. IV, p. 218; Wight et Arn. Prodr. Fl. Pen. Ind. Or. I, p. 374; Ledeb. Fl. Ross. II, p. 345; Boiss. Fl. Orient. II, p. 1081; Forbes et Hemsl. Ind. Fl. Sin. I, p. 337; Henry, List Pl. Formos. p. 47.

T. elata, Spreng. "Syst. IV, Cur. Post. p. 119"; DC. Prodr. IV, p. 220; "Wall. Cat. n. 564."

T. japonica, DC. Prodr. IV, p. 219; Hook. et Arn. Bot. Beech. Voy. pp. 189 et 264; Franch. Pl. David. I, p. 145; A. Gray, in Perry Exped. p. 312.

T. prætermissa, Hance, in "Ann. Sc. Nat. ser. 5, V (1866) p. 214"; Franch. Pl. David. I, p. 145.

T. rubella, Mœnch. Meth. p. 103.

T. scabra, DC. Prodr. IV, p. 219; Miq. Prol. Fl. Jap. p. 252.

LÛTCHÛ (sec. *Hook.* et *Arn.*; *Wright*; *Beechey* sec. *Forbes* et *Hemsley*).

INSULA AMAMI-ŌSHIMA: ad Nazé (*T. Itō*, n. 505, 15 Julio 1894, fl.).

INSULA MYÂKU (*Tashiro*! Julio 1887, frf.): circa Gushiku (*Tatitu*! n. 1241, 25 Majo 1895, fl.).

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NOM. LUTCH.: Kodzumoha seu Kidaikon (M.) ex *Tatitu* in litt.

DISTRIB. Europe, Siberia, Japan, Formosa, China and North Africa.

ARALIACEÆ.

Aralia, L.

A. cordata, Thunb. Fl. Jap, p. 127 ; Miq. Ann. Mus. Bot. Lugd. Bat. I, p. 90 ; Franch. et Sav. Enum. Pl. Jap. I, p. 191 ; Harms, in Engler, Bot. Jahrb. XXIII (1896) p. 15 ; Shitsumon Honzō, Naihen, II, t. 8.

A. edulis, Sieb. et Zucc. Fl. Jap. I, p. 57, t. 25.

A. nudicaulis, Blume, Bijdr. p. 870 (non L.).

A. nutans, Franch. et Sav. Enum. Pl. Jap. II, p. 576, ex Marchal, in Bull. Soc. Bot. Bruxelles, 1881, p. 86.

LŪTCHŪ, ex Shitsumon Honzō, l.c.

DISTRIB. Japan.

Acanthopanax, Miq.

A. ricinifolium, Seem. in Journ. Bot. VI (1868) p. 140, et "Revis. Heder. p. 86"; Franch. et Sav. Enum. Pl. Jap. I, p. 105; Hance, in Journ. Bot. XXV (1885) p. 325; Marchal, in Comptes-rendus Soc. Bot. Belg. XX, 2 (1881) p. 88 ; Forbes et Hemsl. Ind. Fl. Sin. I, p. 340 ; Matsumura, in Bot. Mag. Tōkyō, XII (1898) p. 68.

Aralia Maximowiczii, Van Houtte, "Fl. des Serres, ser. 2, XX (1874) p. 39, t. 2067."

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Brassaiopsis ricinifolia, Seem. in Journ. Bot. II (1864) p. 291.

Kalopanax ricinifolium, Miq. Ann. Mus. Bot. Lugd. Bat. I, p. 16, et Prol. Fl. Jap. p. 90.

Panax ricinifolium, Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV, pt. 2 (1845) p. 199.

Tetrapanax ricinifolium, C. Koch, in "C. Koch et Fint, Wochenschr. II (1859) p. 371."

Insula Utchinâ: in Nishibara-madjiri ad Binnu-taki (*Tira*! n. 763, 1895, steril.); in tractu Kundjan (*Tashiro*! Martio 1887, steril., *Matsumura*! 1897, folium tantum).

Nom. Lutch.: Bōdara (U.) ex *Tashiro* in MS.

Distrib. Japan, China and Corea.

Fatsia, Decne. et Planch.

F. japonica, Decne. et Planch. "Rev. Hort. (1854) p. 105"; Franch. et Sav. Enum. Fl. Jap. I, p. 195; Harms, in Engler et Prantl, Natürl. Pflanzenfam. III, pt. 8 (1894) p. 33; Matsumura, in Bot. Mag. Tōkyō, XII (1898) p. 68; Shitsumon Honzō, Gwaihen, IV, t. 21.

Aralia japonica, Thunb. Fl. Jap. p. 128.

Insula Utchinâ: in tractu Kundjan in montanis (*Tashiro*! April. 1887, frf.), et in monte Ubashimata (*Matsumura*! 1897, folium tantum).

Nom. Lutch.: Ō-asaguroo (U.) ex *Matsumura*.

Distrib. Japan.

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Tetrapanax, C. Koch.

***T. papyrifera,** C. Koch, in "C. Koch et Fint, Wochenschr. II (1859) p. 371"; "Otto et Sond. Hamb. Gartenz. 1862, p. 61"; Seem. in Journ. Bot. VI (1868) p. 58, et "Revis. Hederac. p. 88"; Harms, in Engler et Prantl, Natürl. Pflanzenfam. III, pt. 8 (1894) p. 33, f. 5; Matsumura, in Bot. Mag. XI, pt. 2 (1897) p. 78.

Aralia papyrifera, Hook. "Kew Journ. Bot. IV (1852) p. 53, tt. 1 et 2"; Bot. Mag. t. 4897; Fl. des Serres, tt. 806, 807, et 1201."

Fatsia papyrifera, Benth. et Hook. f. Gen. Pl. I, p. 939; Forbes et Hemsl. Ind. Fl. Sin. I, p. 341; Henry, List Pl. Formos. p. 47.

LÛTCHÛ, cult.

INSULA UTCHINÂ : in pago Mizatu, verisimiliter e China allata (*Matsumura* !).

NOM. LUTCH.: Tchimê-gi (U.) ex *Matsumura*.

DISTRIB. Formosa (Kelung, *Makino* ! 1896).

Said to grow wild in the Yêma Archipelago, but uncertain.

Helwingia, Willd.

H. ruscifolia, Willd. Sp. Pl. IV, p. 716 (1765); "Morr. et Decne. in Bull. Acad. Brux. III (1836) p. 5"; "Decne. in Ann. Sc. Nat. ser. 2, VI, p. 69, t. 7"; Sieb. et Zucc. Fl. Jap. I, p. 164, t. 86.

H. japonica, Morr. et Decne. in "Bull. Acad. Brux. III (1836) p. 170"; DC. Prodr. XVI, 2, p. 680; Miq.

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Prol. Fl. Jap. p. 209; Franch et Sav. Enum. Pl. Jap. I, p. 95.

Osyris japonica, Thunb. Fl. Jap. p. 31, et Ic. Pl. Jap. decas III, t. 1.

INSULA AMAMI-ŌSHIMA: ad Miyamantō inter Yamatohama et Taken (*T. Itō*, n. 615, 17 Julio 1894, frf.).

NOM. LUTCH.: Torifuku (O.) ex *T. Itō*.

DISTRIB. Japan and China.

Schefflera, Forst.

S. octophylla, Harms, in Engler et Prantl, Natürl. Pflanzenfam. III, pt. 8 (1894) p. 38.

Agalma octophyllum, Seem. in "Journ. Bot. II (1864) p. 298, et "Revis. Hederac. p. 24."

Aralia octophylla, Lour. Fl. Cochinch. p. 187; DC. Prodr. IV, p. 258.

Heptapleurum octophyllum, Benth. in Benth. et Hook. f. Gen. Pl. I, p. 194; Hance, in Journ. Linn. Soc. XIII (1872) p. 105; Forbes et Hemsl. Ind. Fl. Sin. I, p. 342; Henry, List Pl. Formos. p. 48.

Paratropia cantoniensis, Hook. et Arn. Bot. Beech. Voy. p. 189; Walp. Repert. IV, p. 433; Benth. Fl. Hongk. p. 136.

LŪTCHŪ (*Wright* sec. *Forbes* et *Hemsley*, *K. Hirasawa*! 1894, in Herb. Normal School, Kagoshima).

INSULA TANE-GA-SHIMA (*S. Tanaka*! n. 433, 28 Sept. 1891, fl.).

INSULA AMAMI-ŌSHIMA: ad Nazé (*T. Ito*, n. 506, 21

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Julio 1894, steril.); inter Nazé et Yamatohama (*T. Itō*, n. 567, 16 Julio 1894, steril.).

INSULA UTCHINÂ: in tractu Kundjan in monte Ubashimata (*Matsumura*! 1897, folium tantum sub "foliola 11, petiolus 3 ped.").

NOM. LUTCH.: Asagurû (U.) ex *Matsumura* in sched.; Mii-asaguru (U.) ex *Tashiro* in MS.; Asagoro (O.) ex *T. Itō*.

DISTRIB. South Japan (prov. Satsuma, *T. Itō*, 1896), Formosa (Kelung, *Makino*! 1896), Hongkong and China.

Gilibertia, Ruiz et Pavon.

G. japonica, Harms, in Engler et Prantl, Natürl. Pflanzenfam. III, pt. 8 (1894) p. 41; Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) p. 68.

Dendropanax japonicus, Seem. in Journ. Bot. II (1864) p. 301, et "Revis. Hederac. p. 27"; Franch. et Sav. Enum. Pl. Jap. I, p. 194; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 733; Forbes et Hemsl. Ind. Fl. Sin. I, p. 342.

Fatsia Mitsde, De Vriese, ex "C. Koch et Fint, Wochenschr. II (1858) p. 371."

Hedera japonica, Jungh. "Nov. Gen. et Sp. Pl. p. 25"; Walp. Repert. II, p. 431."

Textoria japonica, Miq. Ann. Mus. Bot. Lugd. Bat. I, p. 12, et Prol. Fl. Jap. p. 90.

LÛTCHÛ (*H. Nakagawa*! steril.).

INSULA AMAMI-ŌSHIMA: inter Taken et Nishinakama (*T. Itō*, n. 681, 19 Julio 1894, fl.).

INSULA UTCHINÂ: in monte Unna-daki (*T. Itō*, n. 1072, 23 Aug. 1894, frf.).

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NOM. LUTCH.: Wō-asaguru (U.) ex *Tashiro* in MS.
DISTRIB. Japan, South China and the Khasia Hills.

Hedera, Tourn. ex L.

H. Helix, L. Sp. Pl. ed. 1, p. 202; Thunb. Fl. Jap. p. 102; DC. Prodr. IV, p. 261; Eng. Bot. t. 1267; "Roxb. Fl. Ind. ed. Carey et Wall. II, p. 515"; Ledeb. Fl. Ross. II, p. 375; Miq. Prol. Fl. Jap. p. 91; Brandis, For. Fl. Ind. p. 248; Franch. et Sav. Enum. Pl. Jap. I, p. 194; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 739; Hance, in Journ. Bot. 1882, p. 6; Nyman, Conspect. Fl. Europ. p. 319; Forbes et Hemsl. Ind. Fl. Sin. I, p. 343.

LÛTCHÛ, ex *Tashiro* in MS.

DISTRIB. Western Europe, Japan, China, India and North Africa.

CORNACEÆ.

Marlea, Roxb.

M. begoniæfolia, Roxb. "Corom. Pl. t. 283," "Hort. Beng. p. 28," et Fl. Ind. II, p. 261; DC. Prodr. IV, p. 267; "Bot. Regist. (1838) t. 61"; Hook. et Arn. Bot. Beech. Voy. p. 187; Miq. Fl. Ind. Bat. I, pt. 1, p. 744; Brandis, For. Fl. Ind. p. 251; Kurz, For. Fl. Brit. Burm. I, p. 544; Clarke, in Hook. f. Fl. Brit. Ind. II, p. 743; Forbes et Hemsl. Ind. Fl. Sin. I, p. 344; Matsumura, in Bot. Mag. Tōkyō, XII, pt. 2 (1898) p. 68.

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M. affinis, Decne. in "Jacquem. Voy. Bot. p. 74, t. 83."

M. tomentosa, Endl. ex "Hassk. in Flora, XXVII (1844) p. 605."

Alangium begoniifolium, Harms, in Engler et Prantl, Natürl. Pflanzenfam. III, pt. 8 (1894) p. 261, f. 80 A-G.

Diacœcarpium rotundifolium, Hassk. in "Bonplandia, VII, p. 172."

D. tomentosum, Blume, Bijdr. p. 657; "Hassk. in Bonplandia, VII, p. 173.

Stylidium chinensis, Lour. Fl. Cochinch. p. 221.

Stylis chinense, Poir. in Lam. Encycl. suppl. V, p. 260.

Styrax javanicum, Blume, Bijdr. p. 671.

INSULA KAGEROMA adjectis insula Amami-Ōshima (*Tashiro*! Sept. 1887, steril.).

INSULA UTCHINÂ: ad oppidum Shui (*Matsumura*! Majo 1897, fl. sub "arbor magna"); ad Nzatu-madjiri (*Tashiro*! Majo 1887, steril.).

DISTRIB. China, Hongkong, Malaya and India.

Cornus, L.

* **C. officinalis**, Sieb. et Zucc. Fl. Jap. I, p. 100, t. 50; Miq. Prol. Fl. Jap. p. 92; Franch et Sav. Enum. Pl. Jap. I, p. 345; Forbes et Hemsl. Ind. Fl. Sin. I, p. 345; Shitsumon Honzō, Naihen, IV, t. 16.

C. mas, L. *var. japonica*, Sieb. ex Miq. Prol. Fl. Jap. p. 92.

LÛTCHÛ, ex Shitsumon Honzō, l.c. Culta.

DISTRIB. Cultivated in Japan and Corea.

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Found only under cultivation in Japan. Siebold was probably right in making this a variety of the closely allied European *C. mas*, L. [T. Itō].

Aucuba, Thunb.

A. japonica, Thunb. Nov. Gen. p. 61 (1783) et Fl. Jap. pp. 4 et 64, tt. 12 (fœmina) et 13 (masc.); Willd. Sp. Pl. IV, p. 328; Bot. Mag. tt. 1197 (fœm.) et 5512 (masc. et fœm.); DC. Prodr. IV, p. 274; Miq. Prol. Fl. Jap. p. 92; Franch. et Sav. Enum. Pl. Jap. I, p. 197; Forbes et Hemsl. Ind. Fl. Sin. I, p. 346; Shitsumon Honzō, Gwaihen, IV, t. 19.

Eutacis japonica, Salisb. "Prodr. p. 68 (1796)."

LÛTCHÛ, *Wright* sec. *Forbes* et *Hemsley*.

DISTRIB. Japan and the Corean Archipelago.

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